

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: P519107

Luminaire Tested: **SQ4-WB-050U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519107  
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-935-1D-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: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

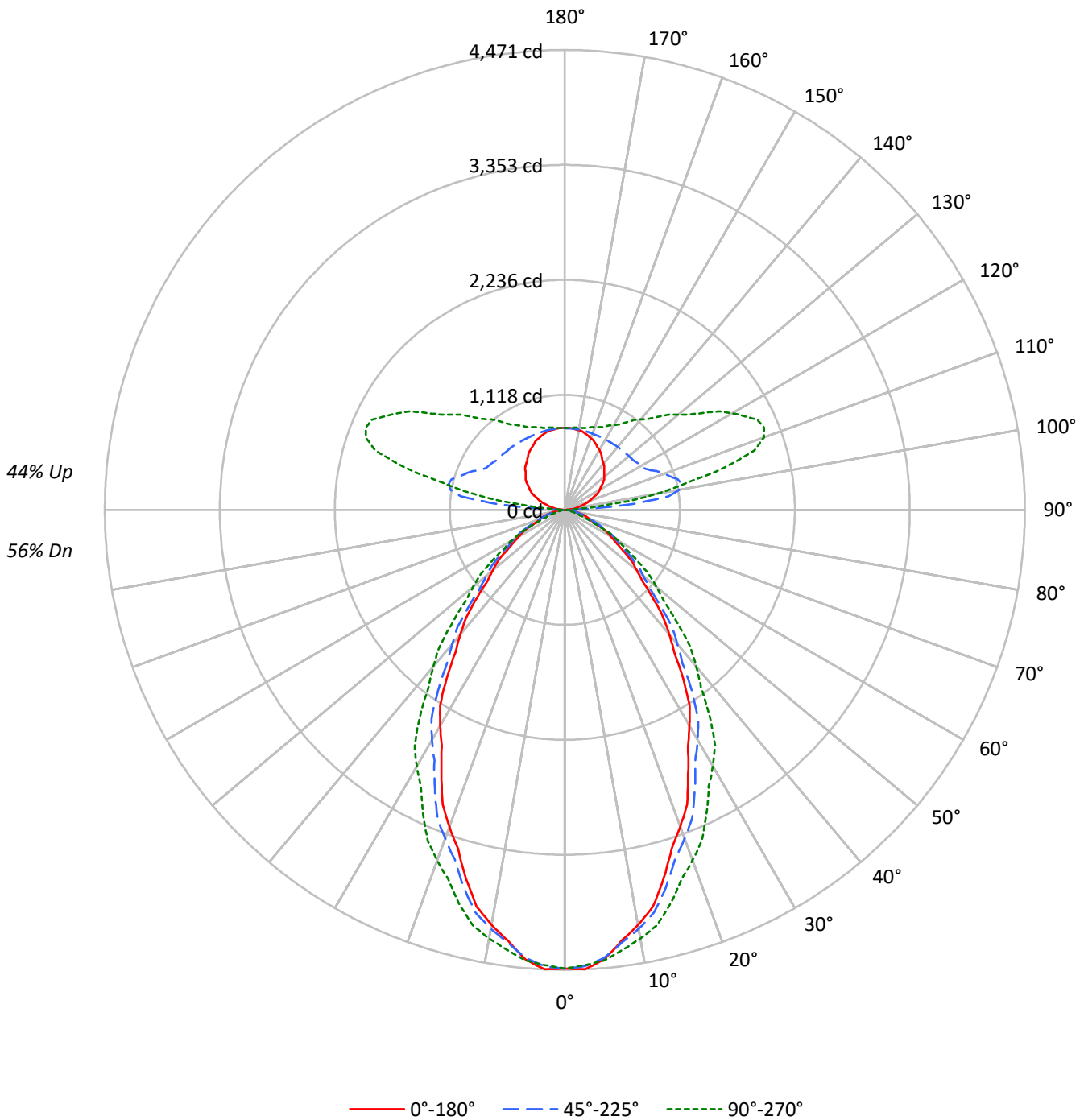
Lumens per Lamp: N/A  
Luminaire Lumens: 11694.8 lumens  
Efficiency: N/A  
Efficacy: 110.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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°	13717	13717	13717
5°	13546	13498	13576
10°	12798	12914	13214
15°	11814	12089	12631
20°	10729	11132	11869
25°	9623	10148	11058
30°	8604	9167	10217
35°	7524	8068	9221
40°	6333	6836	7983
45°	5227	5678	6665
50°	4363	4757	5553
55°	3704	4082	4586
60°	3166	3539	3660
65°	2521	2976	2364
70°	2235	2323	1443
75°	2070	1883	884
80°	1906	1734	763
85°	1725	1588	621



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.1	3.5
10°-20°	1064.1	9.1
20°-30°	1378.4	11.8
30°-40°	1349.8	11.5
40°-50°	1033.1	8.8
50°-60°	688.4	5.9
60°-70°	375.7	3.2
70°-80°	156.5	1.3
80°-90°	47.4	0.4
90°-100°	381.7	3.3
100°-110°	1037.0	8.9
110°-120°	1066.3	9.1
120°-130°	852.5	7.3
130°-140°	669.8	5.7
140°-150°	513.6	4.4
150°-160°	369.4	3.2
160°-170°	225.9	1.9
170°-180°	76.1	0.7
0°-30°	2851.6	24.4
0°-40°	4201.4	35.9
0°-60°	5923.0	50.6
0°-90°	6502.6	55.6
90°-120°	2485.0	21.2
90°-150°	4521.0	38.7
90°-180°	5192.0	44.4
0°-180°	11694.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4460	4460	4460	4460	4460	
5°	4388	4344	4372	4382	4398	408
15°	3711	3697	3797	3900	3967	1036
25°	2836	2844	2990	3121	3259	1304
35°	2004	2014	2149	2294	2456	1246
45°	1202	1225	1305	1404	1532	937
55°	691	720	761	790	855	626
65°	346	375	409	357	325	360
75°	174	174	158	109	74	186
85°	49	49	45	29	18	53
90°	3	10	18	23	23	6
95°	56	209	665	289	194	60
105°	184	287	1140	1736	1634	196
115°	327	397	913	1816	2069	323
125°	450	512	826	1392	1642	401
135°	542	602	803	1134	1278	419
145°	626	672	793	963	1036	393
155°	708	733	788	865	890	327
165°	767	777	790	823	826	217
175°	795	798	793	803	800	76
180°	795	795	795	795	795	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4460.3	4460.3	4460.3	4460.3	4460.3
2.5°	4471.3	4431.5	4441.5	4441.3	4429.0
5°	4387.9	4343.9	4372.3	4382.4	4397.7
7.5°	4225.1	4191.8	4243.5	4281.8	4312.8
10°	4098.3	4069.6	4135.4	4191.2	4231.3
12.5°	3951.1	3927.0	4008.6	4083.4	4135.8
15°	3710.7	3697.3	3796.9	3900.1	3967.1
17.5°	3453.6	3447.1	3561.2	3681.8	3767.5
20°	3278.2	3276.3	3401.5	3527.1	3626.6
22.5°	3101.3	3105.5	3237.1	3367.7	3481.0
25°	2835.9	2843.6	2990.5	3120.9	3258.6
27.5°	2590.5	2593.9	2745.9	2883.5	3030.4
30°	2422.9	2432.5	2581.5	2723.9	2877.0
32.5°	2255.4	2266.5	2412.4	2559.6	2715.7
35°	2004.1	2013.7	2148.9	2293.6	2456.2
37.5°	1745.0	1758.0	1878.1	2014.8	2174.8
40°	1577.5	1596.6	1702.7	1831.5	1988.5
42.5°	1416.2	1439.9	1538.3	1660.5	1802.1
45°	1201.7	1224.6	1305.4	1404.2	1532.4
47.5°	1016.9	1043.3	1105.4	1190.5	1299.9
50°	912.0	936.9	994.2	1057.2	1160.6
52.5°	819.7	844.5	895.6	944.2	1032.2
55°	690.9	719.6	761.3	790.2	855.3
57.5°	585.2	612.7	645.9	658.9	698.3
60°	514.7	545.3	575.4	573.9	595.0
62.5°	450.5	476.6	506.5	485.8	486.9
65°	346.4	375.1	409.0	357.4	324.9
67.5°	279.9	286.0	321.0	249.2	210.6
70°	248.6	248.6	258.3	193.0	160.5
72.5°	218.8	218.8	209.8	157.0	122.9
75°	174.2	174.2	158.5	108.8	74.4
77.5°	134.3	132.7	121.3	81.2	54.0
80°	107.6	107.6	97.9	64.1	43.1
82.5°	84.2	84.2	75.9	50.1	32.1
85°	48.9	48.9	45.0	29.1	17.6
87.5°	17.7	19.2	19.2	14.0	12.4
90°	2.6	10.1	17.9	23.0	23.0
92.5°	23.0	104.5	181.5	78.0	66.0
95°	56.3	208.8	664.8	289.3	194.3
97.5°	93.1	230.6	1019.2	792.9	556.9
100°	117.6	245.1	1127.6	1143.1	923.1
102.5°	142.2	259.7	1156.3	1413.7	1219.7
105°	184.1	286.6	1140.4	1736.4	1633.9
107.5°	227.6	318.1	1074.5	1903.1	1931.6
110°	258.3	340.8	1025.4	1935.9	2058.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	284.9	363.4	976.3	1908.7	2093.2
115°	327.3	397.3	912.9	1816.1	2068.6
117.5°	367.2	434.2	872.5	1684.9	1969.4
120°	393.8	458.8	854.0	1596.9	1879.4
122.5°	416.3	481.3	841.8	1508.7	1781.2
125°	450.0	512.5	825.9	1391.6	1641.6
127.5°	480.2	542.2	817.2	1302.8	1517.3
130°	498.6	558.6	813.1	1247.1	1439.6
132.5°	517.0	577.0	809.0	1199.5	1370.0
135°	542.1	602.1	802.9	1133.5	1278.5
137.5°	569.2	623.7	799.8	1075.2	1197.2
140°	585.6	638.1	797.8	1038.1	1148.1
142.5°	601.9	650.4	795.7	1009.0	1101.0
145°	626.5	671.5	792.7	963.1	1035.6
147.5°	654.1	692.6	790.1	926.9	983.9
150°	672.5	705.0	790.1	906.2	951.2
152.5°	686.8	715.3	788.1	887.6	924.6
155°	708.3	733.3	787.6	864.8	889.8
157.5°	729.3	748.8	787.6	849.4	868.4
160°	741.5	759.0	787.6	839.0	854.0
162.5°	753.8	767.3	789.6	830.8	841.8
165°	767.1	777.1	790.1	823.4	825.9
167.5°	780.9	785.9	792.7	814.7	816.7
170°	785.0	790.0	792.7	810.6	810.6
172.5°	789.1	792.1	792.7	806.5	806.5
175°	795.2	797.7	792.7	802.8	800.3
177.5°	797.3	797.3	791.1	799.2	795.2
180°	795.2	795.2	795.2	795.2	795.2

(END OF REPORT)