

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: P519029

Luminaire Tested: **SQ4-WB-025U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519029  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-840-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

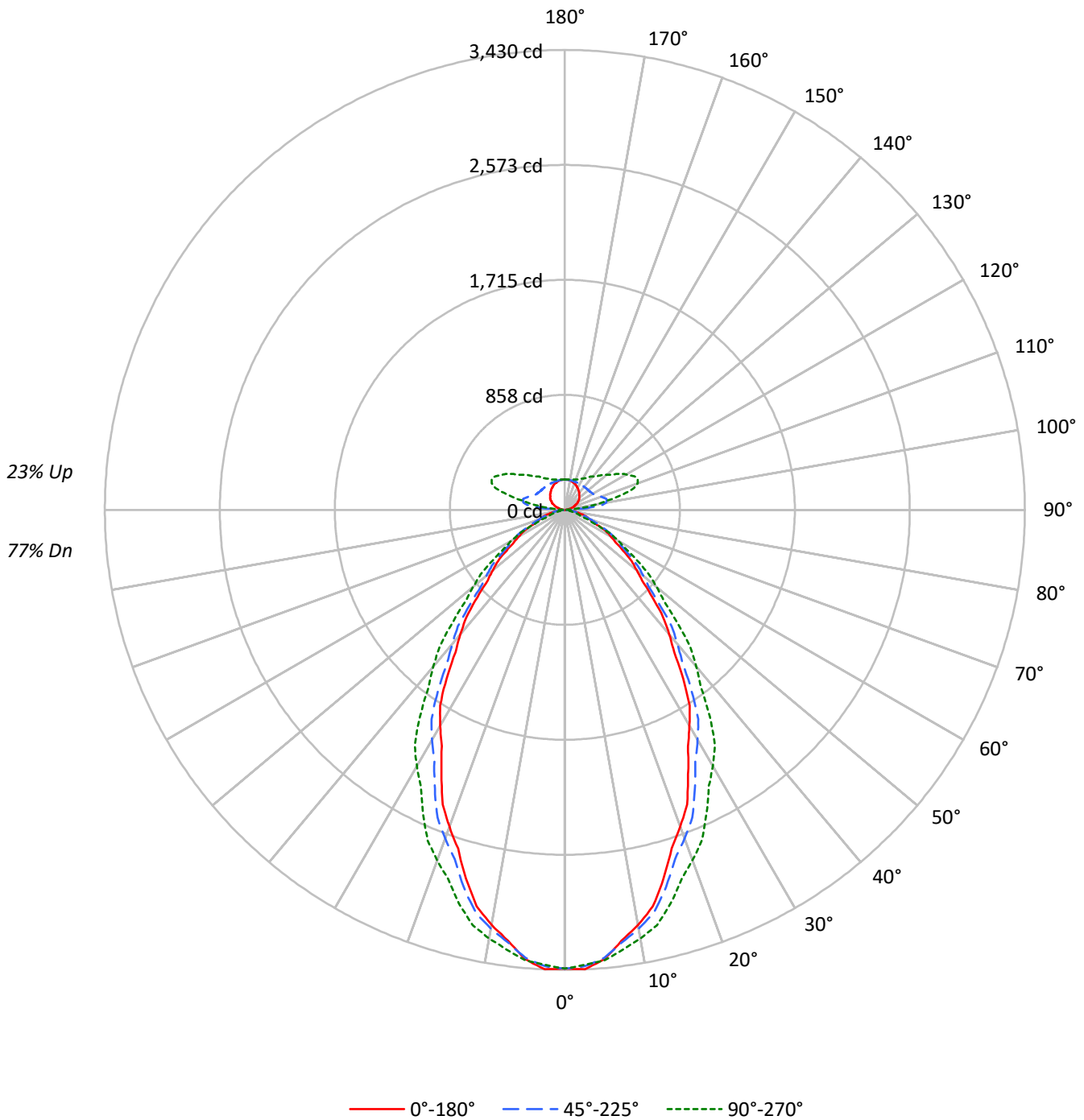
Lumens per Lamp: N/A  
Luminaire Lumens: 6449.9 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.5  
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	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																																			
0	114	114	114	114	108	108	108	108	99	99	99	89	89	89	81	81	81	77									77								
1	106	102	98	95	101	97	94	92	89	87	85	82	80	78	75	73	72	69									69								
2	98	91	86	81	93	87	82	78	80	76	73	74	71	68	68	66	64	60									60								
3	90	82	75	70	86	79	73	68	73	68	64	67	63	60	62	59	56	53									53								
4	84	74	67	61	80	71	65	59	66	61	56	61	57	53	57	53	50	48									48								
5	78	67	60	54	74	65	58	53	60	54	50	56	51	48	52	48	45	43									43								
6	73	61	54	48	69	59	52	47	55	49	45	51	47	43	48	44	41	39									39								
7	68	56	49	43	65	54	47	42	51	45	41	48	43	39	45	40	37	35									35								
8	63	52	44	39	61	50	43	38	47	41	37	44	39	35	41	37	34	32									32								
9	60	48	41	36	57	46	40	35	44	38	34	41	36	33	39	34	31	29									29								
10	56	44	37	33	54	43	37	32	41	35	31	38	33	30	36	32	29	27									27								

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

	0°	45°	90°
0°	21043	21043	21043
5°	20780	20706	20827
10°	19633	19811	20270
15°	18124	18545	19377
20°	16459	17077	18208
25°	14762	15567	16963
30°	13199	14063	15673
35°	11542	12377	14146
40°	9715	10486	12246
45°	8017	8710	10224
50°	6693	7297	8518
55°	5682	6263	7035
60°	4857	5429	5614
65°	3867	4566	3627
70°	3428	3564	2214
75°	3175	2890	1355
80°	2926	2660	1169
85°	2646	2435	953



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.8	4.9
10°-20°	816.2	12.7
20°-30°	1057.2	16.4
30°-40°	1035.3	16.1
40°-50°	792.5	12.3
50°-60°	528.1	8.2
60°-70°	288.1	4.5
70°-80°	120.1	1.9
80°-90°	35.2	0.5
90°-100°	110.0	1.7
100°-110°	289.3	4.5
110°-120°	300.0	4.7
120°-130°	240.6	3.7
130°-140°	188.8	2.9
140°-150°	144.9	2.2
150°-160°	104.4	1.6
160°-170°	63.9	1.0
170°-180°	21.6	0.3
0°-30°	2187.2	33.9
0°-40°	3222.5	50.0
0°-60°	4543.0	70.4
0°-90°	4986.5	77.3
90°-120°	699.3	10.8
90°-150°	1273.6	19.7
90°-180°	1463.0	22.7
0°-180°	6449.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3421	3421	3421	3421	3421	
5°	3366	3332	3354	3361	3373	313
15°	2846	2836	2912	2992	3043	795
25°	2175	2181	2294	2394	2499	1000
35°	1537	1544	1648	1759	1884	956
45°	922	939	1001	1077	1175	719
55°	530	552	584	606	656	480
65°	266	288	314	274	249	276
75°	134	134	122	84	57	143
85°	38	38	34	22	14	41
90°	1	4	12	6	6	3
95°	14	57	190	98	67	16
105°	52	79	320	486	453	55
115°	93	112	256	511	583	91
125°	129	144	233	394	465	114
135°	153	169	226	318	360	119
145°	178	189	223	271	292	112
155°	201	207	223	245	252	92
165°	217	220	223	232	234	61
175°	226	226	224	227	227	21
180°	226	226	226	226	226	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3421.2	3421.2	3421.2	3421.2	3421.2
2.5°	3429.6	3399.0	3406.7	3406.5	3397.1
5°	3365.6	3331.9	3353.6	3361.4	3373.1
7.5°	3240.7	3215.2	3254.8	3284.2	3308.0
10°	3143.4	3121.4	3172.0	3214.7	3245.5
12.5°	3030.6	3012.1	3074.7	3132.0	3172.3
15°	2846.2	2835.9	2912.3	2991.5	3042.9
17.5°	2649.0	2644.0	2731.5	2824.0	2889.7
20°	2514.5	2513.0	2609.0	2705.3	2781.7
22.5°	2378.7	2382.0	2482.9	2583.1	2670.0
25°	2175.2	2181.1	2293.8	2393.8	2499.4
27.5°	1986.9	1989.6	2106.1	2211.7	2324.4
30°	1858.4	1865.8	1980.0	2089.3	2206.7
32.5°	1729.9	1738.5	1850.3	1963.2	2083.0
35°	1537.2	1544.5	1648.3	1759.2	1884.0
37.5°	1338.4	1348.4	1440.5	1545.4	1668.1
40°	1209.9	1224.6	1306.0	1404.8	1525.2
42.5°	1086.2	1104.4	1179.9	1273.7	1382.3
45°	921.7	939.3	1001.3	1077.1	1175.4
47.5°	780.0	800.3	847.9	913.1	997.1
50°	699.5	718.6	762.6	810.9	890.2
52.5°	628.7	647.8	686.9	724.2	791.7
55°	529.9	551.9	584.0	606.1	656.0
57.5°	448.8	470.0	495.4	505.4	535.6
60°	394.8	418.3	441.3	440.2	456.4
62.5°	345.6	365.5	388.5	372.6	373.5
65°	265.7	287.7	313.7	274.1	249.2
67.5°	214.7	219.4	246.2	191.2	161.5
70°	190.6	190.6	198.2	148.0	123.1
72.5°	167.8	167.8	160.9	120.4	94.3
75°	133.6	133.6	121.6	83.5	57.0
77.5°	103.0	101.8	93.1	62.3	41.4
80°	82.6	82.6	75.1	49.2	33.0
82.5°	64.6	64.6	58.2	38.4	24.6
85°	37.5	37.5	34.5	22.3	13.5
87.5°	13.5	14.1	14.3	8.3	7.2
90°	1.4	4.3	11.6	5.8	5.8
92.5°	6.1	29.3	64.8	28.7	18.5
95°	14.5	56.9	189.6	97.7	66.6
97.5°	25.2	62.5	283.7	225.6	166.2
100°	33.3	67.3	312.6	316.8	246.0
102.5°	40.2	71.9	320.7	394.6	334.0
105°	52.1	79.0	319.9	485.6	453.0
107.5°	64.3	89.2	301.6	532.8	540.7
110°	72.4	95.0	286.6	545.0	578.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	80.5	102.0	272.7	537.3	589.4
115°	92.6	112.4	256.2	511.1	583.3
117.5°	104.5	122.6	244.9	474.8	554.9
120°	111.4	128.4	240.3	450.4	528.3
122.5°	118.4	135.4	236.8	426.1	502.8
125°	128.8	144.4	233.0	393.8	464.6
127.5°	137.2	153.1	229.8	367.8	427.5
130°	141.8	158.8	228.7	351.5	406.7
132.5°	146.5	163.5	227.5	337.5	387.0
135°	153.4	169.0	225.8	317.9	360.4
137.5°	160.7	175.9	225.5	303.3	338.1
140°	166.4	180.6	224.3	291.7	324.2
142.5°	171.1	184.1	224.3	283.4	311.5
145°	178.0	189.3	222.9	271.1	292.4
147.5°	185.0	196.0	222.9	260.9	278.5
150°	189.6	199.5	222.9	255.1	269.2
152.5°	194.2	201.9	222.9	250.3	261.1
155°	201.2	206.8	222.9	244.8	251.8
157.5°	206.4	211.8	222.9	239.8	244.9
160°	209.9	214.1	222.9	237.4	240.3
162.5°	213.3	216.5	222.9	235.1	237.9
165°	217.1	219.9	222.9	231.6	234.5
167.5°	220.6	222.0	224.3	230.2	231.3
170°	222.9	224.3	224.3	230.1	230.1
172.5°	224.0	224.3	224.3	228.9	227.8
175°	225.8	225.8	224.3	227.2	227.2
177.5°	225.8	225.8	224.6	226.9	225.8
180°	225.8	225.8	225.8	225.8	225.8

(END OF REPORT)