

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: P519221

Luminaire Tested: **SQ4-WB-075U-100D-840-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519221
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, 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-075U-100D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

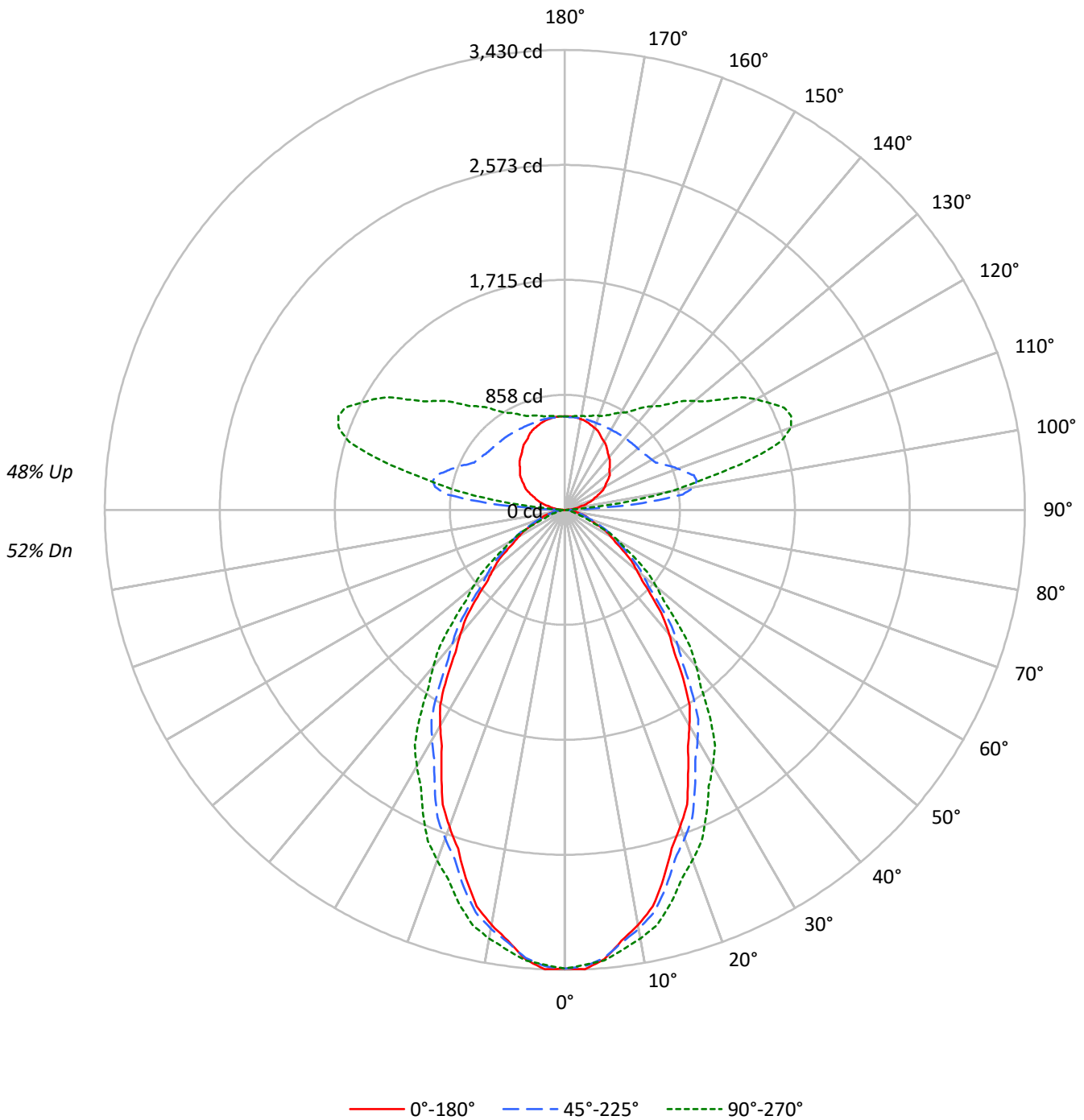
Lumens per Lamp: N/A
Luminaire Lumens: 9522.9 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 82.9
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	0	
RCR																						
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	52				
1	99	96	92	89	92	89	86	83	76	74	72	64	63	61	53	52	52	46				
2	92	85	79	75	85	79	74	70	68	65	62	58	55	53	48	47	45	41				
3	84	76	69	64	78	71	65	60	61	57	53	52	49	47	44	42	40	36				
4	78	68	61	55	72	64	57	52	55	50	47	48	44	41	40	38	36	32				
5	72	61	54	48	67	57	51	46	50	45	41	43	40	37	37	34	32	29				
6	67	56	48	43	62	52	45	41	46	41	37	40	36	33	34	31	29	26				
7	62	51	43	38	58	48	41	36	42	37	33	37	33	30	32	29	26	24				
8	58	46	39	34	54	44	37	33	39	33	30	34	30	27	29	26	24	22				
9	54	43	36	31	51	40	34	30	36	31	27	31	27	24	27	24	22	20				
10	51	39	33	28	47	37	31	27	33	28	25	29	25	22	26	23	20	18				

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	3.3
10°-20°	816.2	8.6
20°-30°	1057.2	11.1
30°-40°	1035.3	10.9
40°-50°	792.5	8.3
50°-60°	528.1	5.5
60°-70°	288.1	3.0
70°-80°	120.1	1.3
80°-90°	35.8	0.4
90°-100°	328.4	3.4
100°-110°	903.5	9.5
110°-120°	932.6	9.8
120°-130°	747.2	7.8
130°-140°	586.8	6.2
140°-150°	449.7	4.7
150°-160°	323.3	3.4
160°-170°	197.7	2.1
170°-180°	66.6	0.7
0°-30°	2187.2	23.0
0°-40°	3222.5	33.8
0°-60°	4543.0	47.7
0°-90°	4987.0	52.4
90°-120°	2164.4	22.7
90°-150°	3948.2	41.5
90°-180°	4536.0	47.6
0°-180°	9522.9	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°	2	6	10	13	13	5
95°	49	179	581	248	158	52
105°	162	248	996	1516	1415	170
115°	286	348	798	1590	1804	282
125°	394	449	724	1226	1436	352
135°	476	528	704	991	1121	367
145°	550	587	693	844	910	345
155°	622	642	689	759	781	286
165°	673	681	692	720	724	190
175°	696	698	693	702	701	66
180°	696	696	696	696	696	

TEST NUMBER: P519221

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-6

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	14.4	14.1	9.8	8.7
90°	1.5	5.8	10.4	13.3	13.3
92.5°	20.4	87.4	151.4	58.1	47.7
95°	48.9	179.3	580.7	248.3	158.5
97.5°	79.7	198.8	886.2	682.8	481.8
100°	102.2	210.9	982.2	991.4	808.8
102.5°	123.5	225.2	1007.1	1229.9	1062.5
105°	161.5	248.4	995.5	1516.1	1414.7
107.5°	197.6	277.0	938.9	1656.3	1686.4
110°	223.7	296.1	896.3	1691.2	1795.5



TEST NUMBER: P519221

CATALOG NUMBER: SQ4-WB-075U-100D-840-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	247.4	317.5	853.6	1668.7	1827.5
115°	285.9	348.2	798.5	1590.0	1804.4
117.5°	322.7	380.0	763.5	1479.5	1722.0
120°	345.2	400.2	748.1	1396.7	1647.3
122.5°	365.3	420.4	737.4	1324.2	1562.0
125°	394.1	449.1	724.4	1225.5	1435.5
127.5°	421.3	473.7	715.8	1143.1	1327.3
130°	435.5	489.1	711.1	1094.1	1262.2
132.5°	452.1	505.7	707.5	1051.1	1202.9
135°	475.5	527.7	703.7	991.1	1121.4
137.5°	497.5	545.8	700.4	942.5	1050.0
140°	514.0	559.0	699.2	910.3	1007.4
142.5°	528.3	569.7	696.9	881.5	964.7
145°	549.6	587.3	693.3	844.4	909.6
147.5°	572.4	604.9	691.5	811.5	863.7
150°	586.6	615.6	690.3	793.5	834.0
152.5°	599.7	626.3	689.2	777.9	811.5
155°	622.2	642.5	688.9	759.0	780.7
157.5°	638.5	655.0	688.9	743.4	758.5
160°	650.3	663.4	688.9	735.0	746.6
162.5°	659.8	670.5	690.0	727.9	737.1
165°	672.6	681.2	691.8	720.1	724.4
167.5°	681.4	688.1	693.3	713.5	714.6
170°	687.4	691.7	693.3	711.1	711.1
172.5°	692.1	694.1	693.3	707.5	706.3
175°	696.3	697.7	693.3	702.2	700.7
177.5°	697.4	697.4	692.7	699.8	697.4
180°	696.3	696.3	696.3	696.3	696.3

(END OF REPORT)