

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: P519091

Luminaire Tested: **SQ4-WB-050U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519091
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-830-1D-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

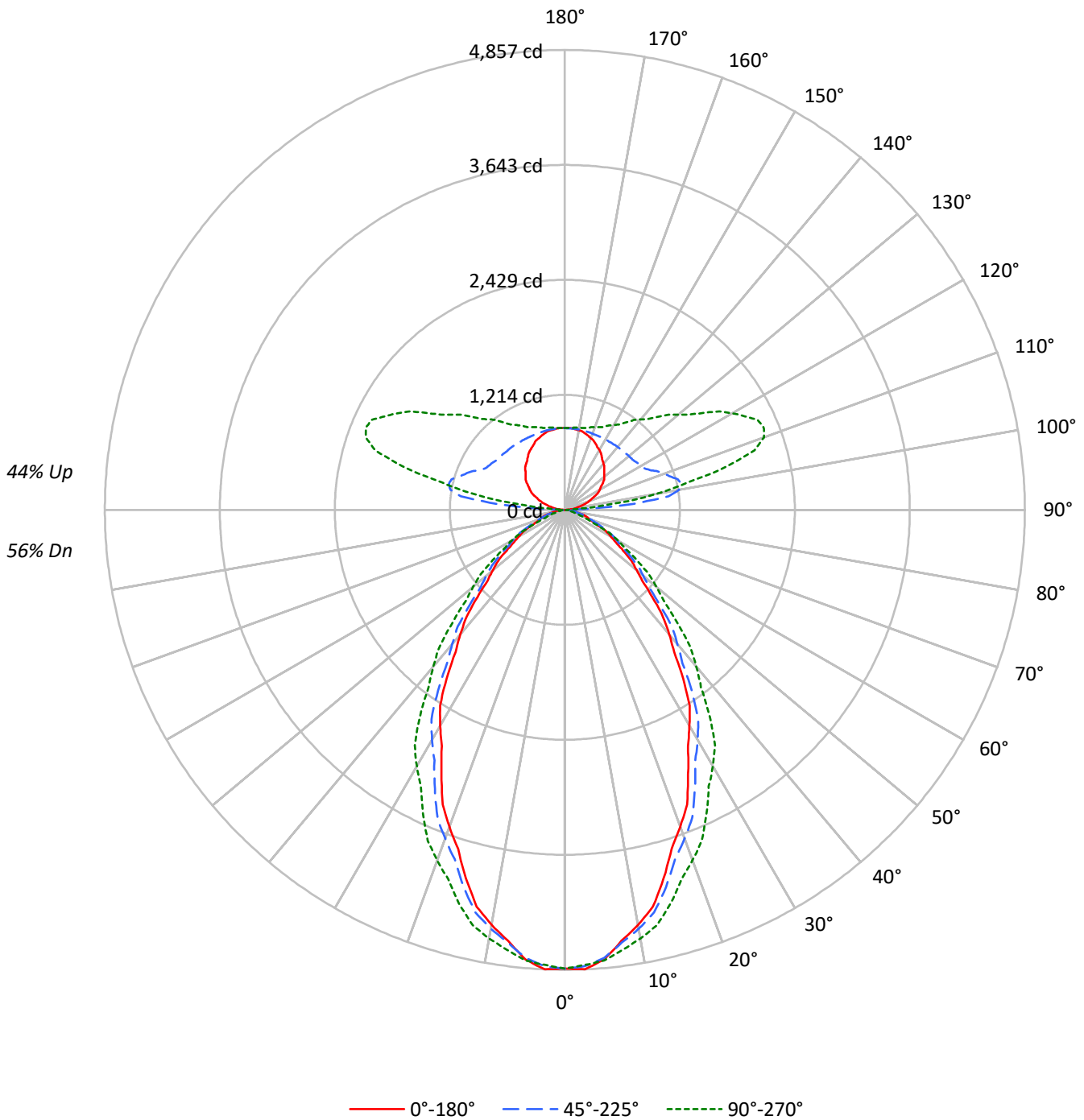
Lumens per Lamp: N/A
Luminaire Lumens: 12704.3 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56				56
1	100	96	93	90	93	90	87	84	78	76	74	66	65	64	56	55	54	49				49
2	92	86	80	76	86	80	75	71	70	66	63	60	57	55	51	49	48	43				43
3	85	77	70	65	79	72	66	61	63	58	55	54	51	48	46	44	42	38				38
4	79	69	62	56	73	65	58	53	57	52	48	49	46	43	42	40	38	34				34
5	73	62	55	49	68	58	52	47	51	46	42	45	41	38	39	36	34	31				31
6	68	56	49	43	63	53	46	41	47	42	38	41	37	34	36	33	30	28				28
7	63	51	44	39	59	49	42	37	43	38	34	38	34	31	33	30	28	25				25
8	59	47	40	35	55	45	38	33	40	34	31	35	31	28	31	28	25	23				23
9	55	43	36	31	51	41	35	30	37	32	28	33	29	26	29	26	23	21				21
10	52	40	33	29	48	38	32	28	34	29	26	30	26	23	27	24	21	20				20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14901	14901	14901
5°	14716	14663	14748
10°	13903	14029	14354
15°	12834	13132	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9959	11098
35°	8174	8764	10017
40°	6880	7426	8672
45°	5678	6168	7240
50°	4740	5167	6032
55°	4024	4434	4982
60°	3440	3845	3975
65°	2738	3233	2568
70°	2428	2523	1567
75°	2248	2046	960
80°	2070	1883	829
85°	1877	1725	674



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	444.4	3.5
10°-20°	1156.0	9.1
20°-30°	1497.3	11.8
30°-40°	1466.3	11.5
40°-50°	1122.3	8.8
50°-60°	747.9	5.9
60°-70°	408.1	3.2
70°-80°	170.0	1.3
80°-90°	51.5	0.4
90°-100°	414.7	3.3
100°-110°	1126.6	8.9
110°-120°	1158.3	9.1
120°-130°	926.1	7.3
130°-140°	727.6	5.7
140°-150°	557.9	4.4
150°-160°	401.2	3.2
160°-170°	245.4	1.9
170°-180°	82.7	0.7
0°-30°	3097.7	24.4
0°-40°	4564.0	35.9
0°-60°	6434.2	50.6
0°-90°	7063.8	55.6
90°-120°	2699.5	21.2
90°-150°	4911.2	38.7
90°-180°	5640.0	44.4
0°-180°	12704.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4845	4845	4845	4845	4845	
5°	4767	4719	4750	4761	4777	443
15°	4031	4016	4125	4237	4310	1126
25°	3081	3089	3249	3390	3540	1417
35°	2177	2188	2334	2492	2668	1353
45°	1305	1330	1418	1525	1665	1018
55°	750	782	827	858	929	680
65°	376	408	444	388	353	391
75°	189	189	172	118	81	202
85°	53	53	49	32	19	58
90°	3	11	19	25	25	7
95°	61	227	722	314	211	65
105°	200	311	1239	1886	1775	212
115°	356	432	992	1973	2247	351
125°	489	557	897	1512	1783	436
135°	589	654	872	1231	1389	455
145°	680	729	861	1046	1125	427
155°	769	797	856	940	967	355
165°	833	844	858	894	897	235
175°	864	867	861	872	869	82
180°	864	864	864	864	864	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4845.3	4845.3	4845.3	4845.3	4845.3
2.5°	4857.2	4814.0	4824.9	4824.6	4811.3
5°	4766.7	4718.8	4749.7	4760.7	4777.3
7.5°	4589.8	4553.6	4609.8	4651.3	4685.0
10°	4452.0	4420.8	4492.4	4552.9	4596.6
12.5°	4292.1	4265.9	4354.6	4435.9	4492.8
15°	4031.0	4016.5	4124.6	4236.8	4309.6
17.5°	3751.7	3744.6	3868.6	3999.6	4092.7
20°	3561.2	3559.1	3695.1	3831.5	3939.6
22.5°	3369.0	3373.6	3516.5	3658.4	3781.4
25°	3080.7	3089.0	3248.6	3390.2	3539.9
27.5°	2814.1	2817.8	2982.9	3132.4	3292.0
30°	2632.1	2642.5	2804.3	2959.0	3125.3
32.5°	2450.1	2462.1	2620.6	2780.5	2950.1
35°	2177.1	2187.5	2334.4	2491.5	2668.2
37.5°	1895.6	1909.7	2040.2	2188.7	2362.5
40°	1713.6	1734.4	1849.7	1989.6	2160.1
42.5°	1538.4	1564.2	1671.1	1803.9	1957.7
45°	1305.4	1330.4	1418.1	1525.4	1664.7
47.5°	1104.7	1133.4	1200.8	1293.2	1412.1
50°	990.8	1017.8	1080.0	1148.5	1260.8
52.5°	890.4	917.4	972.9	1025.7	1121.3
55°	750.5	781.7	827.0	858.4	929.1
57.5°	635.7	665.6	701.6	715.8	758.6
60°	559.2	592.4	625.1	623.5	646.3
62.5°	489.4	517.7	550.2	527.7	529.0
65°	376.3	407.5	444.3	388.3	352.9
67.5°	304.0	310.7	348.7	270.8	228.8
70°	270.0	270.0	280.6	209.7	174.3
72.5°	237.7	237.7	227.9	170.5	133.5
75°	189.2	189.2	172.2	118.2	80.8
77.5°	145.8	144.2	131.8	88.2	58.7
80°	116.9	116.9	106.3	69.6	46.8
82.5°	91.4	91.4	82.5	54.4	34.9
85°	53.2	53.2	48.9	31.6	19.1
87.5°	19.3	20.9	20.9	15.2	13.5
90°	2.8	10.9	19.4	25.0	25.0
92.5°	25.0	113.5	197.2	84.7	71.7
95°	61.1	226.8	722.2	314.3	211.1
97.5°	101.1	250.5	1107.2	861.4	605.0
100°	127.8	266.3	1225.0	1241.8	1002.8
102.5°	154.4	282.1	1256.1	1535.7	1325.0
105°	200.0	311.4	1238.9	1886.3	1775.0
107.5°	247.2	345.5	1167.2	2067.3	2098.3
110°	280.6	370.2	1113.9	2103.0	2236.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	309.4	394.7	1060.5	2073.4	2273.8
115°	355.5	431.6	991.6	1972.9	2247.2
117.5°	398.9	471.7	947.8	1830.3	2139.4
120°	427.8	498.4	927.8	1734.7	2041.6
122.5°	452.2	522.8	914.4	1638.9	1935.0
125°	488.9	556.8	897.2	1511.7	1783.3
127.5°	521.7	589.0	887.8	1415.3	1648.3
130°	541.7	606.8	883.3	1354.7	1563.9
132.5°	561.7	626.8	878.9	1303.1	1488.3
135°	588.9	654.1	872.2	1231.3	1388.9
137.5°	618.3	677.5	868.9	1168.0	1300.5
140°	636.1	693.1	866.6	1127.7	1247.2
142.5°	653.9	706.6	864.4	1096.1	1196.1
145°	680.5	729.4	861.1	1046.2	1125.0
147.5°	710.5	752.4	858.3	1006.9	1068.9
150°	730.5	765.8	858.3	984.4	1033.3
152.5°	746.1	777.1	856.1	964.2	1004.4
155°	769.4	796.6	855.5	939.5	966.6
157.5°	792.2	813.4	855.5	922.7	943.3
160°	805.5	824.6	855.5	911.5	927.8
162.5°	818.9	833.5	857.8	902.5	914.4
165°	833.3	844.2	858.3	894.5	897.2
167.5°	848.3	853.7	861.1	885.0	887.2
170°	852.8	858.2	861.1	880.5	880.5
172.5°	857.2	860.5	861.1	876.1	876.1
175°	863.9	866.6	861.1	872.1	869.4
177.5°	866.1	866.1	859.4	868.2	863.9
180°	863.9	863.9	863.9	863.9	863.9

(END OF REPORT)