

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: P519092

Luminaire Tested: **SQ4-WB-050U-075D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519092
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-4
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

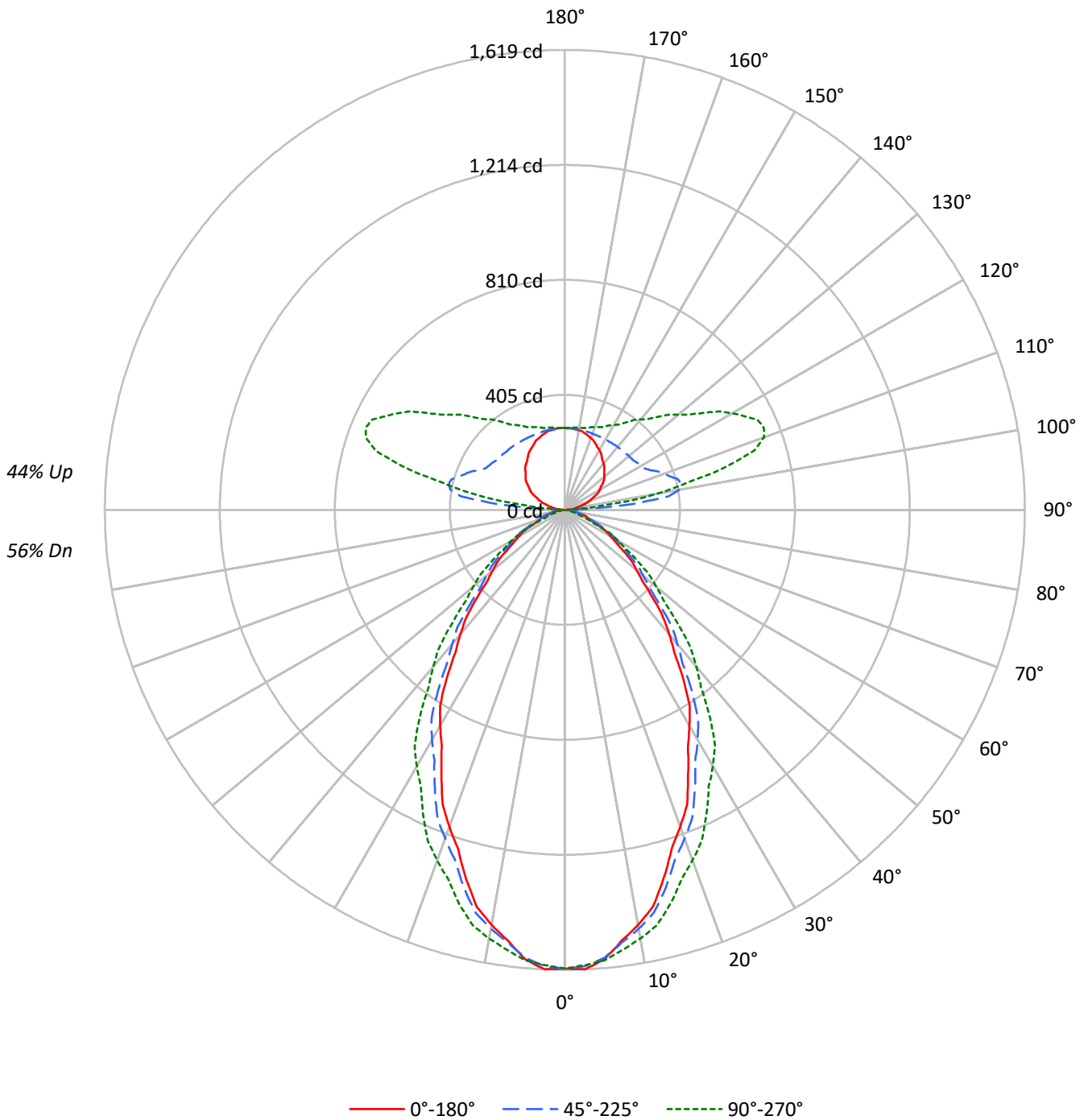
Lumens per Lamp: N/A
Luminaire Lumens: 4234.8 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 36.3
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°	12835	13133	13721
20°	11655	12093	12893
25°	10454	11024	12012
30°	9347	9959	11099
35°	8174	8764	10017
40°	6880	7426	8672
45°	5677	6168	7240
50°	4741	5167	6033
55°	4025	4435	4982
60°	3440	3845	3975
65°	2738	3233	2567
70°	2428	2522	1567
75°	2249	2046	959
80°	2072	1881	829
85°	1874	1725	677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.1	3.5
10°-20°	385.3	9.1
20°-30°	499.1	11.8
30°-40°	488.8	11.5
40°-50°	374.1	8.8
50°-60°	249.3	5.9
60°-70°	136.0	3.2
70°-80°	56.7	1.3
80°-90°	17.2	0.4
90°-100°	138.2	3.3
100°-110°	375.5	8.9
110°-120°	386.1	9.1
120°-130°	308.7	7.3
130°-140°	242.5	5.7
140°-150°	186.0	4.4
150°-160°	133.7	3.2
160°-170°	81.8	1.9
170°-180°	27.6	0.7
0°-30°	1032.6	24.4
0°-40°	1521.3	35.9
0°-60°	2144.8	50.6
0°-90°	2354.6	55.6
90°-120°	899.8	21.2
90°-150°	1637.0	38.7
90°-180°	1880.0	44.4
0°-180°	4234.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1615	1615	1615	1615	1615	
5°	1589	1573	1583	1587	1592	148
15°	1344	1339	1375	1412	1436	375
25°	1027	1030	1083	1130	1180	472
35°	726	729	778	830	889	451
45°	435	444	473	508	555	339
55°	250	261	276	286	310	227
65°	125	136	148	129	118	130
75°	63	63	57	39	27	67
85°	18	18	16	10	6	19
90°	1	4	6	8	8	2
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1615.1	1615.1	1615.1	1615.1	1615.1
2.5°	1619.1	1604.7	1608.3	1608.2	1603.8
5°	1588.9	1572.9	1583.2	1586.9	1592.4
7.5°	1529.9	1517.9	1536.6	1550.4	1561.7
10°	1484.0	1473.6	1497.5	1517.6	1532.2
12.5°	1430.7	1422.0	1451.5	1478.6	1497.6
15°	1343.7	1338.8	1374.9	1412.3	1436.5
17.5°	1250.6	1248.2	1289.5	1333.2	1364.2
20°	1187.1	1186.4	1231.7	1277.2	1313.2
22.5°	1123.0	1124.5	1172.2	1219.5	1260.5
25°	1026.9	1029.7	1082.9	1130.1	1180.0
27.5°	938.0	939.3	994.3	1044.1	1097.3
30°	877.4	880.8	934.8	986.3	1041.8
32.5°	816.7	820.7	873.5	926.8	983.4
35°	725.7	729.2	778.1	830.5	889.4
37.5°	631.9	636.6	680.1	729.6	787.5
40°	571.2	578.1	616.6	663.2	720.0
42.5°	512.8	521.4	557.0	601.3	652.6
45°	435.1	443.5	472.7	508.5	554.9
47.5°	368.2	377.8	400.3	431.1	470.7
50°	330.3	339.3	360.0	382.8	420.3
52.5°	296.8	305.8	324.3	341.9	373.8
55°	250.2	260.6	275.7	286.1	309.7
57.5°	211.9	221.9	233.9	238.6	252.9
60°	186.4	197.5	208.4	207.8	215.4
62.5°	163.1	172.6	183.4	175.9	176.3
65°	125.4	135.8	148.1	129.4	117.6
67.5°	101.3	103.6	116.2	90.3	76.3
70°	90.0	90.0	93.5	69.9	58.1
72.5°	79.2	79.2	76.0	56.8	44.5
75°	63.1	63.1	57.4	39.4	26.9
77.5°	48.6	48.1	43.9	29.4	19.6
80°	39.0	39.0	35.4	23.2	15.6
82.5°	30.5	30.5	27.5	18.1	11.6
85°	17.7	17.7	16.3	10.5	6.4
87.5°	6.4	7.0	7.0	5.1	4.5
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>103.1</i>	131.6	353.5	691.1	757.9
115°	<i>118.5</i>	143.9	330.5	657.6	749.1
117.5°	<i>133.0</i>	157.2	315.9	610.1	713.1
120°	<i>142.6</i>	166.1	309.3	578.2	680.5
122.5°	<i>150.7</i>	174.3	304.8	546.3	645.0
125°	<i>163.0</i>	185.6	299.1	503.9	594.4
127.5°	<i>173.9</i>	196.3	295.9	471.8	549.4
130°	<i>180.6</i>	202.3	294.4	451.6	521.3
132.5°	<i>187.2</i>	208.9	293.0	434.4	496.1
135°	<i>196.3</i>	218.0	290.7	410.4	463.0
137.5°	<i>206.1</i>	225.8	289.6	389.3	433.5
140°	<i>212.0</i>	231.0	288.9	375.9	415.7
142.5°	<i>218.0</i>	235.5	288.1	365.4	398.7
145°	<i>226.8</i>	243.1	287.0	348.7	375.0
147.5°	<i>236.8</i>	250.8	286.1	335.6	356.3
150°	<i>243.5</i>	255.3	286.1	328.1	344.4
152.5°	<i>248.7</i>	259.0	285.4	321.4	334.8
155°	<i>256.5</i>	265.5	285.2	313.2	322.2
157.5°	<i>264.1</i>	271.1	285.2	307.6	314.4
160°	<i>268.5</i>	274.9	285.2	303.8	309.3
162.5°	<i>273.0</i>	277.8	285.9	300.8	304.8
165°	<i>277.8</i>	281.4	286.1	298.2	299.1
167.5°	<i>282.8</i>	284.6	287.0	295.0	295.7
170°	<i>284.3</i>	286.1	287.0	293.5	293.5
172.5°	<i>285.7</i>	286.8	287.0	292.0	292.0
175°	<i>288.0</i>	288.9	287.0	290.7	289.8
177.5°	<i>288.7</i>	288.7	286.5	289.4	288.0
180°	<i>288.0</i>	288.0	288.0	288.0	288.0

(END OF REPORT)