

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: P519100

Luminaire Tested: **SQ4-WB-050U-075D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P519100
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

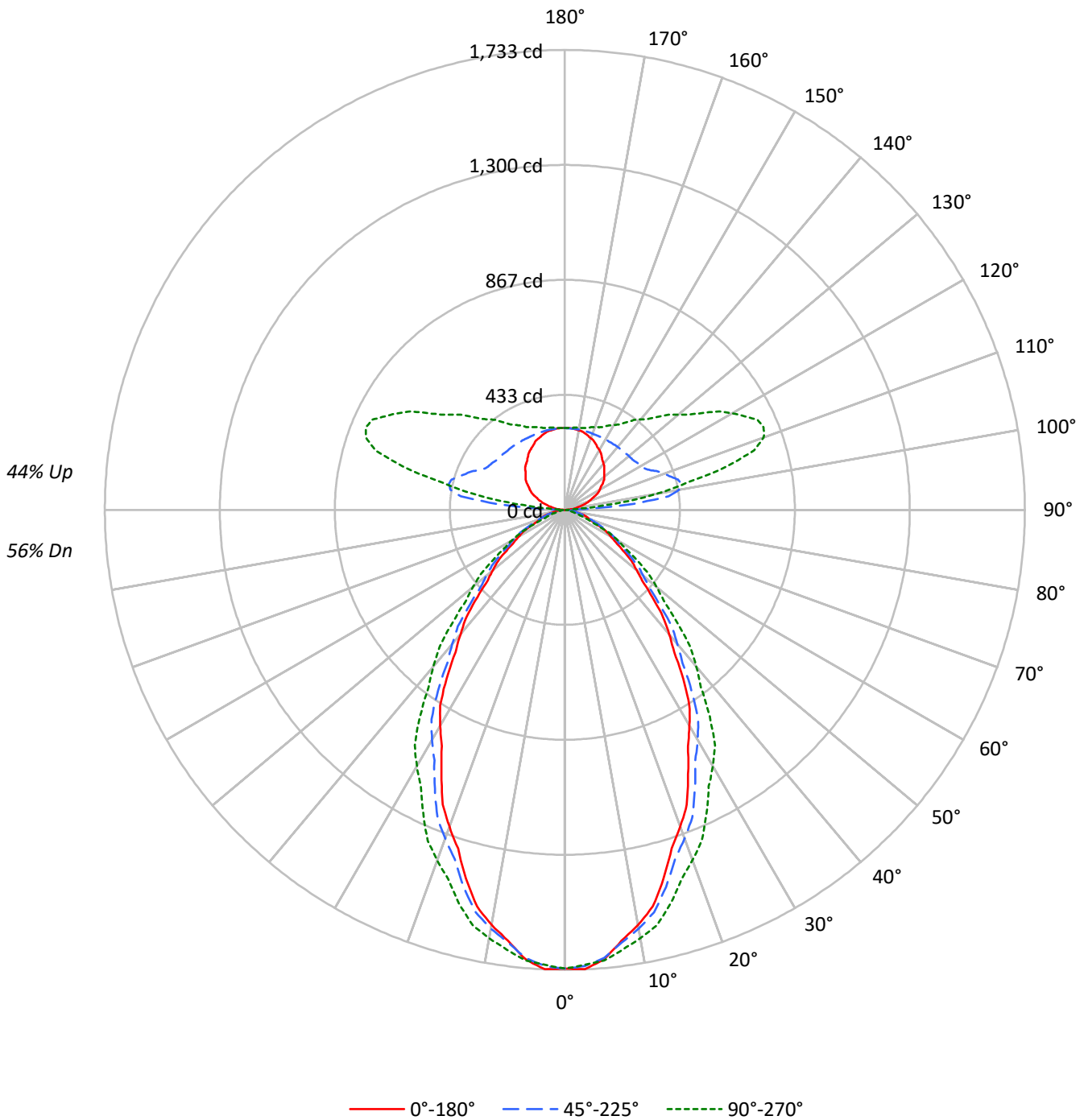
Lumens per Lamp: N/A
Luminaire Lumens: 4531.6 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

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				
RC	80					70					50					30				
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°	15946	15946	15946
5°	15747	15691	15782
10°	14877	15012	15361
15°	13734	14052	14683
20°	12472	12942	13798
25°	11187	11797	12854
30°	10003	10657	11877
35°	8747	9379	10720
40°	7361	7947	9280
45°	6075	6600	7748
50°	5072	5530	6455
55°	4306	4745	5331
60°	3681	4115	4253
65°	2930	3460	2749
70°	2598	2700	1678
75°	2406	2189	1027
80°	2216	2014	887
85°	2011	1842	720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.5	3.5
10°-20°	412.3	9.1
20°-30°	534.1	11.8
30°-40°	523.0	11.5
40°-50°	400.3	8.8
50°-60°	266.8	5.9
60°-70°	145.6	3.2
70°-80°	60.7	1.3
80°-90°	18.4	0.4
90°-100°	147.9	3.3
100°-110°	401.8	8.9
110°-120°	413.2	9.1
120°-130°	330.3	7.3
130°-140°	259.5	5.7
140°-150°	199.0	4.4
150°-160°	143.1	3.2
160°-170°	87.5	1.9
170°-180°	29.5	0.7
0°-30°	1105.0	24.4
0°-40°	1628.0	35.9
0°-60°	2295.1	50.6
0°-90°	2519.7	55.6
90°-120°	962.9	21.2
90°-150°	1751.8	38.7
90°-180°	2012.0	44.4
0°-180°	4531.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1728	1728	1728	1728	1728	
5°	1700	1683	1694	1698	1704	158
15°	1438	1433	1471	1511	1537	402
25°	1099	1102	1159	1209	1263	505
35°	777	780	833	889	952	483
45°	466	474	506	544	594	363
55°	268	279	295	306	331	243
65°	134	145	158	138	126	140
75°	68	68	61	42	29	72
85°	19	19	17	11	7	21
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	495	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1728.3	1728.3	1728.3	1728.3	1728.3
2.5°	1732.6	1717.2	1721.1	1720.9	1716.2
5°	1700.3	1683.2	1694.2	1698.1	1704.1
7.5°	1637.2	1624.3	1644.3	1659.1	1671.2
10°	1588.0	1576.9	1602.4	1624.0	1639.6
12.5°	1531.0	1521.7	1553.3	1582.3	1602.6
15°	1437.9	1432.7	1471.2	1511.3	1537.2
17.5°	1338.2	1335.7	1379.9	1426.6	1459.9
20°	1270.3	1269.5	1318.1	1366.7	1405.3
22.5°	1201.7	1203.4	1254.3	1304.9	1348.8
25°	1098.9	1101.8	1158.8	1209.3	1262.7
27.5°	1003.8	1005.1	1064.0	1117.3	1174.3
30°	938.9	942.6	1000.3	1055.5	1114.8
32.5°	873.9	878.3	934.8	991.8	1052.3
35°	776.6	780.3	832.7	888.7	951.8
37.5°	676.2	681.2	727.7	780.7	842.7
40°	611.2	618.7	659.8	709.7	770.5
42.5°	548.8	558.0	596.1	643.4	698.3
45°	465.6	474.5	505.8	544.1	593.8
47.5°	394.1	404.3	428.3	461.3	503.7
50°	353.4	363.0	385.3	409.7	449.7
52.5°	317.6	327.2	347.0	365.9	400.0
55°	267.7	278.8	295.0	306.2	331.4
57.5°	226.8	237.4	250.3	255.3	270.6
60°	199.5	211.3	223.0	222.4	230.5
62.5°	174.6	184.7	196.3	188.2	188.7
65°	134.2	145.4	158.5	138.5	125.9
67.5°	108.4	110.8	124.4	96.6	81.6
70°	96.3	96.3	100.1	74.8	62.2
72.5°	84.8	84.8	81.3	60.8	47.6
75°	67.5	67.5	61.4	42.2	28.8
77.5°	52.0	51.4	47.0	31.5	20.9
80°	41.7	41.7	37.9	24.8	16.7
82.5°	32.6	32.6	29.4	19.4	12.4
85°	19.0	19.0	17.4	11.3	6.8
87.5°	6.9	7.5	7.5	5.4	4.8
90°	1.0	3.9	6.9	8.9	8.9
92.5°	8.9	40.5	70.3	30.2	25.6
95°	21.8	80.9	257.6	112.1	75.3
97.5°	36.1	89.3	394.9	307.3	215.8
100°	45.6	95.0	437.0	442.9	357.7
102.5°	55.1	100.6	448.0	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.3	416.3	737.4	748.5
110°	100.1	132.0	397.3	750.1	797.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	<i>110.4</i>	140.8	378.3	739.6	811.1
115°	<i>126.8</i>	154.0	353.7	703.7	801.6
117.5°	<i>142.3</i>	168.2	338.1	652.9	763.1
120°	<i>152.6</i>	177.8	330.9	618.8	728.3
122.5°	<i>161.3</i>	186.5	326.2	584.6	690.2
125°	<i>174.4</i>	198.6	320.0	539.2	636.1
127.5°	<i>186.1</i>	210.1	316.7	504.8	588.0
130°	<i>193.2</i>	216.5	315.1	483.2	557.8
132.5°	<i>200.3</i>	223.6	313.5	464.8	530.9
135°	<i>210.1</i>	233.3	311.1	439.2	495.4
137.5°	<i>220.6</i>	241.7	309.9	416.6	463.9
140°	<i>226.9</i>	247.2	309.1	402.2	444.9
142.5°	<i>233.2</i>	252.0	308.3	391.0	426.6
145°	<i>242.8</i>	260.2	307.2	373.2	401.3
147.5°	<i>253.5</i>	268.4	306.2	359.2	381.3
150°	<i>260.6</i>	273.2	306.2	351.1	368.6
152.5°	<i>266.1</i>	277.2	305.4	343.9	358.3
155°	<i>274.5</i>	284.1	305.2	335.1	344.8
157.5°	<i>282.6</i>	290.1	305.2	329.1	336.5
160°	<i>287.3</i>	294.1	305.2	325.1	330.9
162.5°	<i>292.1</i>	297.3	306.0	321.9	326.2
165°	<i>297.2</i>	301.1	306.2	319.1	320.0
167.5°	<i>302.6</i>	304.5	307.2	315.7	316.5
170°	<i>304.2</i>	306.1	307.2	314.1	314.1
172.5°	<i>305.8</i>	306.9	307.2	312.5	312.5
175°	<i>308.1</i>	309.1	307.2	311.1	310.1
177.5°	<i>308.9</i>	308.9	306.6	309.7	308.1
180°	<i>308.1</i>	308.1	308.1	308.1	308.1

(END OF REPORT)