

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

Brand: CORELITE

Report Number: P#

Luminaire Tested: 24D3X-LP-45-L850.ies

Issue Date: 12/21/2023

Test Information

Test Method: LM-79-2019
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2305-008-4)
Test Lab: INNOVATION CENTER
Issue Date: 12/21/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24D3X-LP-45-L850.ies
Description: 2x4 D3X-LP AT 4500LM 5000K 80CRI
Light Source: -
Ballast/Driver: -

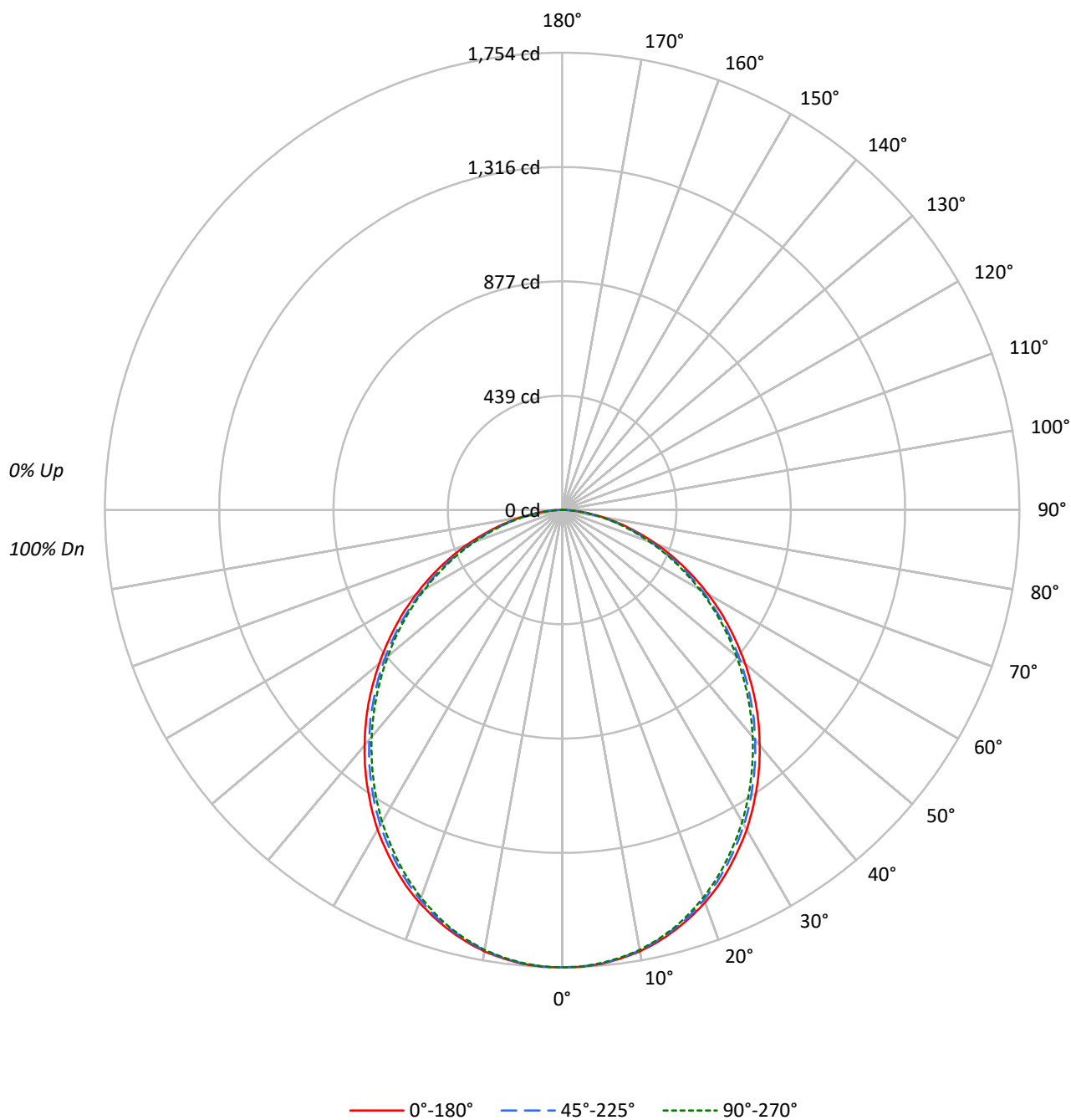
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4423.3 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33
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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	87	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	73	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	63	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	54	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	47	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	42	42	40
7	66	53	44	38	64	52	44	38	51	43	38	49	42	38	48	42	37	37	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	33	33	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	30	41	35	30	30	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	28	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2360	2360	2360
5°	2360	2358	2356
10°	2349	2343	2341
15°	2326	2317	2312
20°	2294	2279	2266
25°	2250	2226	2208
30°	2200	2167	2146
35°	2138	2097	2074
40°	2070	2022	1997
45°	1999	1942	1914
50°	1918	1859	1826
55°	1833	1769	1736
60°	1739	1670	1638
65°	1637	1560	1528
70°	1523	1441	1405
75°	1382	1304	1282
80°	1197	1133	1139
85°	988	974	911

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1999 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	3.7
10°-20°	468.9	10.6
20°-30°	691.1	15.6
30°-40°	800.0	18.1
40°-50°	789.8	17.9
50°-60°	676.5	15.3
60°-70°	489.1	11.1
70°-80°	269.6	6.1
80°-90°	72.6	1.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1325.7	30.0
0°-40°	2125.7	48.1
0°-60°	3592.0	81.2
0°-90°	4423.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4423.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1754	1754	1754	1754	1754	
5°	1748	1747	1746	1744	1744	166
15°	1670	1668	1664	1661	1660	471
25°	1516	1512	1499	1492	1488	698
35°	1302	1293	1277	1266	1262	814
45°	1051	1037	1021	1011	1006	810
55°	782	767	754	743	740	699
65°	514	502	490	483	480	510
75°	266	258	251	250	247	282
85°	64	64	63	59	59	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1754.3	1754.3	1754.3	1754.3	1754.3
2.5°	1754.3	1754.3	1752.6	1752.6	1752.6
5°	1747.6	1746.8	1746.0	1744.3	1744.3
7.5°	1735.2	1735.2	1732.7	1732.7	1731.0
10°	1719.4	1717.7	1715.2	1715.2	1713.6
12.5°	1697.0	1695.3	1692.0	1691.2	1688.7
15°	1669.6	1667.9	1663.7	1661.2	1659.6
17.5°	1638.0	1635.5	1630.5	1626.4	1623.0
20°	1602.3	1599.0	1591.5	1586.5	1582.3
22.5°	1561.6	1558.3	1547.5	1541.6	1537.5
25°	1515.9	1511.7	1499.3	1491.8	1487.6
27.5°	1466.9	1461.9	1447.8	1439.5	1435.3
30°	1416.2	1408.7	1394.6	1384.7	1381.3
32.5°	1359.7	1352.3	1338.1	1326.5	1323.2
35°	1301.6	1293.3	1276.7	1265.9	1262.5
37.5°	1241.8	1231.0	1216.0	1205.2	1200.3
40°	1178.7	1167.9	1151.2	1139.6	1137.1
42.5°	1115.5	1102.2	1088.1	1076.5	1071.5
45°	1050.7	1036.6	1020.8	1010.9	1005.9
47.5°	982.6	969.3	955.2	943.6	939.4
50°	916.2	902.1	887.9	877.1	872.2
52.5°	848.1	833.9	820.7	811.5	806.5
55°	781.6	766.7	754.2	743.4	740.1
57.5°	714.3	701.0	686.9	677.0	674.5
60°	646.2	634.6	620.5	611.3	608.8
62.5°	580.6	569.0	555.7	546.6	542.4
65°	514.2	502.5	490.1	482.6	480.1
67.5°	449.4	438.6	427.8	420.3	418.6
70°	387.1	376.3	366.3	359.7	357.2
72.5°	324.8	317.3	307.3	303.2	300.7
75°	265.8	257.5	250.8	250.0	246.7
77.5°	208.5	207.7	196.9	195.2	195.2
80°	154.5	152.0	146.2	144.5	147.0
82.5°	106.3	104.7	101.3	100.5	99.7
85°	64.0	64.0	63.1	59.0	59.0
87.5°	29.1	28.2	27.4	28.2	30.7
90°	0.0	0.0	0.0	0.0	0.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.0	15.6	14.4	16.0	16.3	13.8	15.4	14.1	15.7	16.0
	3H	15.7	17.2	16.1	17.5	17.9	15.4	16.8	15.8	17.2	17.5
	4H	16.4	17.7	16.7	18.1	18.4	16.0	17.4	16.4	17.7	18.1
	6H	16.8	18.0	17.2	18.4	18.8	16.4	17.7	16.9	18.1	18.5
	8H	16.9	18.1	17.4	18.5	18.9	16.6	17.8	17.0	18.2	18.6
	12H	17.0	18.2	17.4	18.5	19.0	16.7	17.8	17.1	18.2	18.6
4H	2H	14.6	16.0	15.0	16.3	16.7	14.4	15.7	14.8	16.1	16.5
	3H	16.5	17.6	16.9	18.0	18.4	16.2	17.4	16.6	17.8	18.2
	4H	17.2	18.3	17.7	18.7	19.1	16.9	18.0	17.4	18.4	18.8
	6H	17.8	18.7	18.3	19.1	19.6	17.5	18.4	18.0	18.8	19.3
	8H	18.0	18.8	18.4	19.3	19.7	17.7	18.5	18.1	19.0	19.4
	12H	18.1	18.9	18.6	19.3	19.8	17.8	18.5	18.3	19.0	19.5
8H	4H	17.5	18.3	18.0	18.8	19.2	17.2	18.1	17.7	18.5	19.0
	6H	18.2	18.9	18.7	19.4	19.8	17.9	18.6	18.4	19.1	19.6
	8H	18.4	19.0	18.9	19.5	20.0	18.1	18.8	18.6	19.3	19.8
	12H	18.6	19.2	19.1	19.7	20.2	18.3	18.9	18.8	19.4	19.9
12H	4H	17.5	18.3	18.0	18.7	19.2	17.3	18.0	17.7	18.5	19.0
	6H	18.2	18.9	18.7	19.3	19.8	18.0	18.6	18.5	19.0	19.6
	8H	18.5	19.1	19.0	19.6	20.1	18.2	18.8	18.7	19.3	19.8

(END OF REPORT)