Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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-90-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-90-L850.ies
Description:	2x4 D3X-LP AT 9000LM 5000K 80CRI
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	8887.7 lumens
Efficiency:	N/A
Efficacy:	127.5 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):	69.7
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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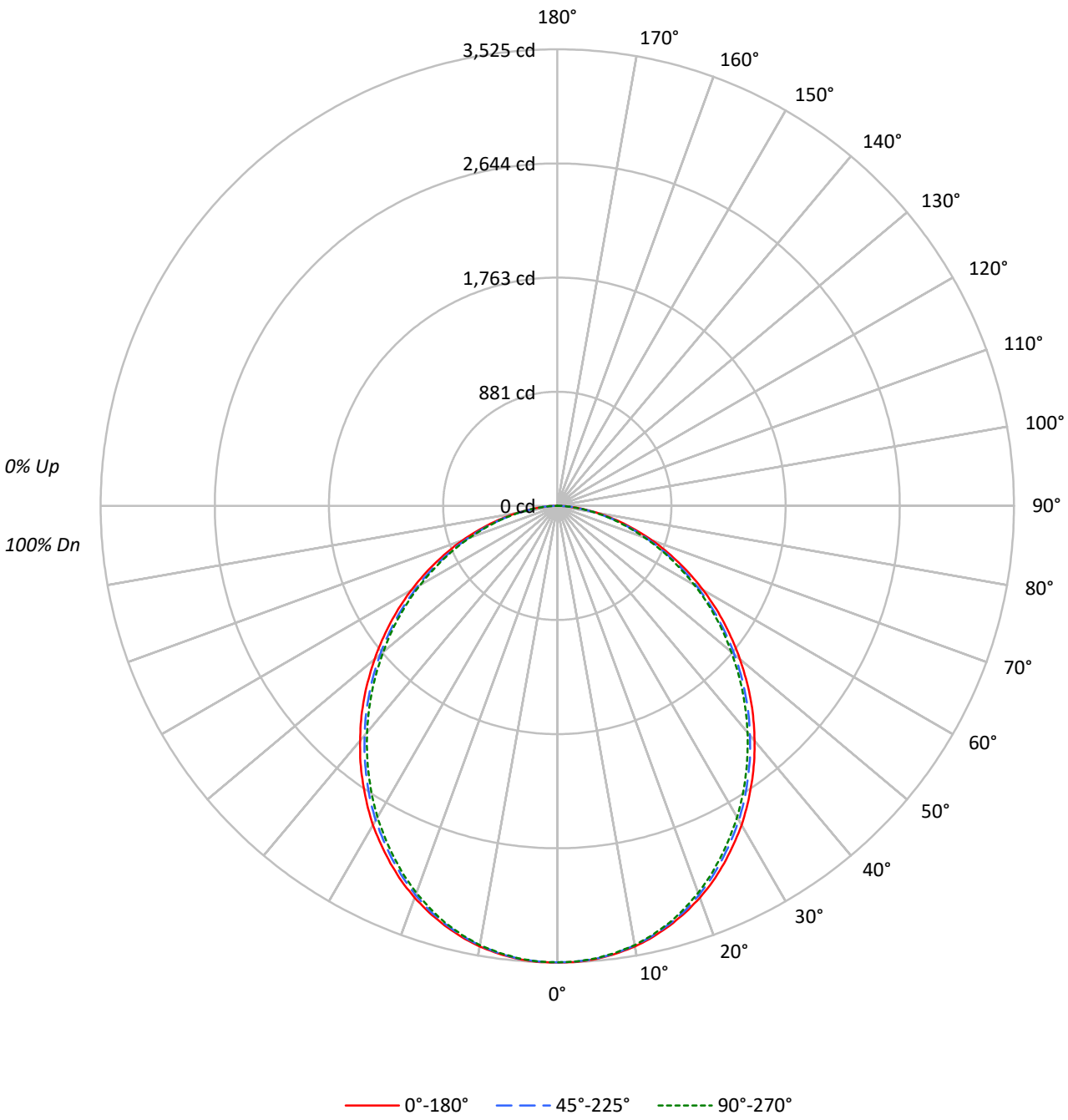
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	51	43	38	49	42	38	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4743	4743	4743
5°	4743	4738	4734
10°	4720	4709	4704
15°	4673	4657	4645
20°	4610	4579	4552
25°	4522	4472	4438
30°	4421	4354	4312
35°	4296	4213	4167
40°	4160	4063	4013
45°	4017	3903	3846
50°	3853	3734	3668
55°	3684	3555	3488
60°	3494	3355	3292
65°	3289	3135	3071
70°	3059	2895	2823
75°	2777	2620	2577
80°	2405	2276	2289
85°	1984	1958	1829

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4017 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.9	3.7
10°-20°	942.2	10.6
20°-30°	1388.5	15.6
30°-40°	1607.4	18.1
40°-50°	1587.0	17.9
50°-60°	1359.3	15.3
60°-70°	982.7	11.1
70°-80°	541.7	6.1
80°-90°	145.9	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°	2663.6	30.0
0°-40°	4271.1	48.1
0°-60°	7217.3	81.2
0°-90°	8887.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8887.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3525	3525	3525	3525	3525	
5°	3512	3510	3508	3505	3505	333
15°	3355	3351	3343	3338	3335	946
25°	3046	3038	3012	2998	2989	1402
35°	2615	2599	2565	2544	2537	1635
45°	2111	2083	2051	2031	2021	1627
55°	1570	1540	1515	1494	1487	1404
65°	1033	1010	985	970	965	1024
75°	534	517	504	502	496	567
85°	128	128	127	118	118	151
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*3524.8*	*3524.8*	*3524.8*	*3524.8*	*3524.8*
2.5°	*3524.8*	3524.8	3521.5	3521.5	3521.5
5°	*3511.5*	3509.8	3508.2	3504.8	3504.8
7.5°	*3486.5*	3486.5	3481.5	3481.5	3478.1
10°	*3454.8*	3451.4	3446.4	3446.4	3443.1
12.5°	*3409.7*	3406.4	3399.7	3398.0	3393.0
15°	*3354.6*	3351.3	3342.9	3337.9	3334.6
17.5°	*3291.2*	3286.2	3276.2	3267.8	3261.2
20°	*3219.4*	3212.8	3197.7	3187.7	3179.4
22.5°	*3137.6*	3131.0	3109.3	3097.6	3089.2
25°	*3045.9*	3037.5	3012.5	2997.5	2989.1
27.5°	*2947.4*	2937.4	2909.0	2892.3	2884.0
30°	*2845.6*	2830.6	2802.2	2782.2	2775.5
32.5°	*2732.1*	2717.1	2688.7	2665.3	2658.7
35°	*2615.3*	2598.6	2565.2	2543.5	2536.8
37.5°	*2495.1*	2473.4	2443.4	2421.7	2411.7
40°	*2368.3*	2346.6	2313.2	2289.8	2284.8
42.5°	*2241.4*	2214.7	2186.3	2163.0	2153.0
45°	*2111.2*	2082.9	2051.2	2031.1	2021.1
47.5°	*1974.4*	1947.7	1919.3	1895.9	1887.6
50°	*1840.9*	1812.5	1784.1	1762.4	1752.4
52.5°	*1704.0*	1675.6	1648.9	1630.6	1620.6
55°	*1570.5*	1540.5	1515.4	1493.7	1487.0
57.5°	*1435.3*	1408.6	1380.2	1360.2	1355.2
60°	*1298.5*	1275.1	1246.7	1228.4	1223.3
62.5°	*1166.6*	1143.2	1116.5	1098.2	1089.8
65°	*1033.1*	1009.7	984.7	969.7	964.7
67.5°	*902.9*	881.2	859.5	844.5	841.2
70°	*777.7*	756.0	736.0	722.7	717.7
72.5°	*652.6*	637.5	617.5	609.2	604.2
75°	*534.1*	517.4	504.0	502.4	495.7
77.5°	*418.9*	417.2	395.5	392.2	392.2
80°	*310.4*	305.4	293.7	290.4	295.4
82.5°	*213.6*	210.3	203.6	201.9	200.3
85°	*128.5*	128.5	126.8	118.5	118.5
87.5°	*58.4*	56.7	55.1	56.7	61.8
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	16.5	18.1	16.8	18.4	18.7	16.2	17.8	16.6	18.1	18.4
	3H	18.2	19.6	18.5	19.9	20.3	17.8	19.3	18.2	19.6	20.0
	4H	18.8	20.1	19.2	20.5	20.9	18.4	19.8	18.8	20.1	20.5
	6H	19.2	20.5	19.6	20.8	21.2	18.9	20.1	19.3	20.5	20.9
	8H	19.4	20.5	19.8	20.9	21.3	19.0	20.2	19.4	20.6	21.0
	12H	19.4	20.6	19.9	21.0	21.4	19.1	20.2	19.5	20.6	21.0
4H	2H	17.0	18.4	17.4	18.7	19.1	16.8	18.2	17.2	18.5	18.9
	3H	18.9	20.1	19.3	20.5	20.9	18.6	19.8	19.1	20.2	20.6
	4H	19.7	20.7	20.1	21.1	21.5	19.4	20.4	19.8	20.8	21.2
	6H	20.2	21.1	20.7	21.6	22.0	19.9	20.8	20.4	21.3	21.7
	8H	20.4	21.2	20.9	21.7	22.2	20.1	20.9	20.6	21.4	21.8
	12H	20.5	21.3	21.0	21.8	22.2	20.2	21.0	20.7	21.4	21.9
8H	4H	19.9	20.8	20.4	21.2	21.7	19.7	20.5	20.1	20.9	21.4
	6H	20.6	21.3	21.1	21.8	22.3	20.3	21.0	20.8	21.5	22.0
	8H	20.8	21.5	21.4	22.0	22.5	20.6	21.2	21.1	21.7	22.2
	12H	21.0	21.6	21.5	22.1	22.6	20.7	21.3	21.2	21.8	22.3
12H	4H	19.9	20.7	20.4	21.2	21.6	19.7	20.4	20.2	20.9	21.4
	6H	20.6	21.3	21.2	21.7	22.3	20.4	21.0	20.9	21.5	22.0
	8H	20.9	21.5	21.4	22.0	22.5	20.7	21.2	21.2	21.7	22.3

(END OF REPORT)