

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P393412

Luminaire Tested: **24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393412  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-31)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)  
Description: 2X4 ENCOUNTER, 3000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2893.4 lumens  
Efficiency: N/A  
Efficacy: 138.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

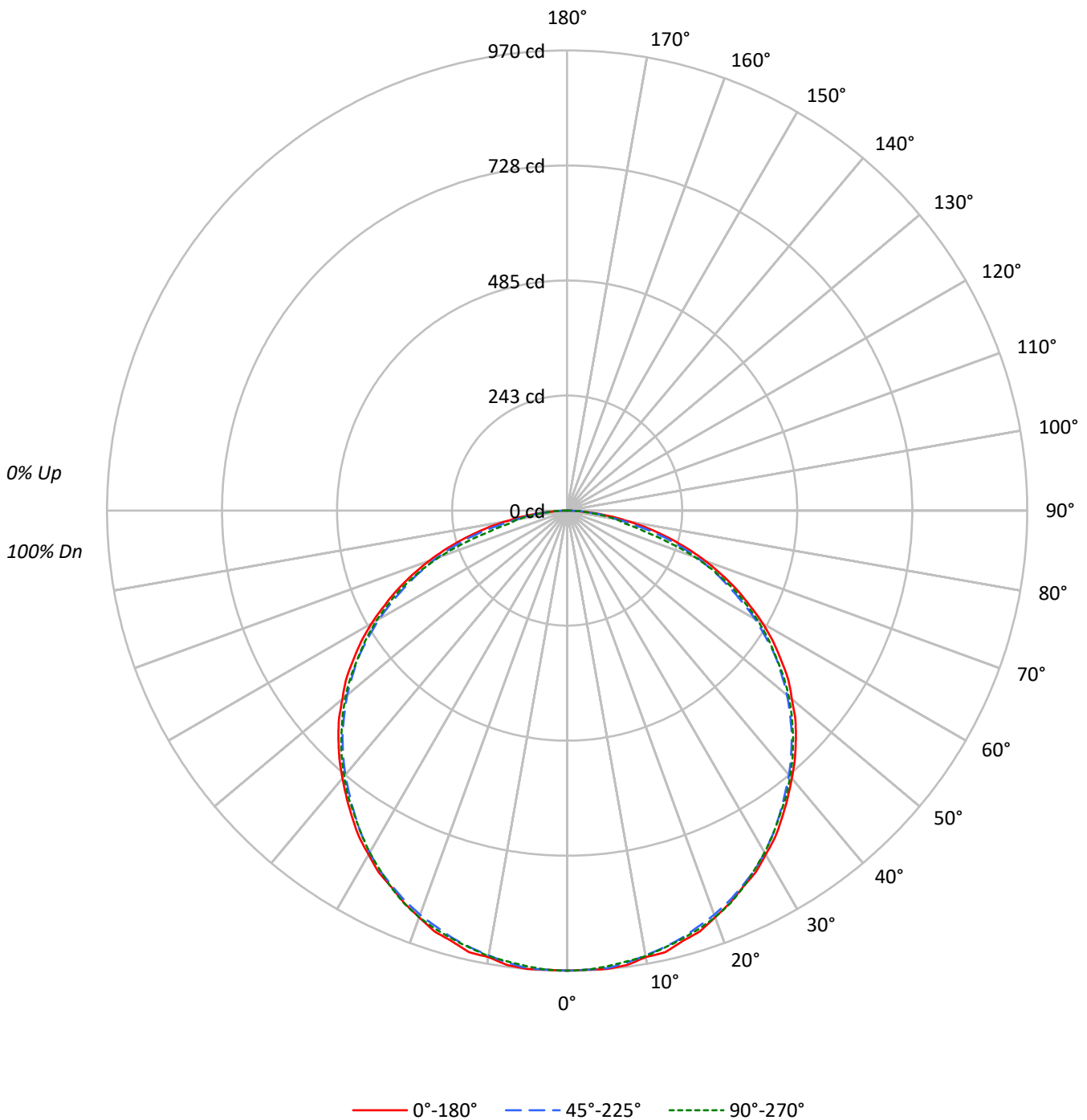
Input Watts (W): 20.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P393412

CATALOG NUMBER: 24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P393412

CATALOG NUMBER: 24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1305	1305	1305
5°	1310	1307	1302
10°	1306	1301	1303
15°	1309	1299	1302
20°	1306	1298	1306
25°	1301	1296	1302
30°	1301	1293	1293
35°	1297	1283	1285
40°	1294	1278	1284
45°	1298	1274	1281
50°	1295	1267	1277
55°	1293	1258	1260
60°	1282	1231	1249
65°	1257	1191	1221
70°	1218	1155	1129
75°	1147	1064	871
80°	1020	829	807
85°	834	746	673



TEST NUMBER: P393412

CATALOG NUMBER: 24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.9	3.2
10°-20°	263.7	9.1
20°-30°	403.0	13.9
30°-40°	491.2	17.0
40°-50°	518.4	17.9
50°-60°	481.3	16.6
60°-70°	377.0	13.0
70°-80°	210.7	7.3
80°-90°	56.1	1.9
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°	758.6	26.2
0°-40°	1249.8	43.2
0°-60°	2249.6	77.7
0°-90°	2893.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2893.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	970	969	968	968	964	92
15°	940	934	933	932	935	266
25°	876	875	873	870	877	405
35°	790	787	781	784	782	495
45°	682	674	670	666	673	526
55°	551	544	536	533	537	493
65°	395	386	374	378	384	390
75°	221	214	205	175	168	233
85°	54	48	48	46	44	62
90°	0	0	0	0	0	



TEST NUMBER: P393412

CATALOG NUMBER: 24EN-LD2-30-UNV-L82765-W2A-1-U (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	969.8	969.8	969.8	969.8	969.8
2.5°	968.9	970.8	968.9	967.0	968.9
5°	969.8	968.9	968.0	968.0	964.2
7.5°	966.1	964.2	961.3	962.3	958.5
10°	955.6	955.6	951.9	954.7	953.7
12.5°	953.7	944.3	943.3	944.3	944.3
15°	939.5	933.9	932.9	932.0	934.8
17.5°	930.1	920.6	919.6	917.8	924.4
20°	912.1	906.4	906.4	903.5	912.1
22.5°	896.0	890.3	891.2	887.4	896.9
25°	876.1	875.1	873.2	870.4	877.0
27.5°	860.0	856.2	855.2	852.4	854.3
30°	837.2	836.3	832.5	831.6	832.5
32.5°	816.4	813.6	807.9	808.8	807.9
35°	789.9	787.1	781.4	784.2	782.3
37.5°	763.4	760.5	753.9	756.7	758.6
40°	736.9	733.1	727.4	730.2	731.2
42.5°	710.3	703.7	699.0	697.1	703.7
45°	681.9	674.3	669.6	665.8	673.4
47.5°	652.6	644.0	637.4	635.5	642.1
50°	618.5	611.8	605.2	602.4	609.9
52.5°	588.2	577.7	570.2	568.3	574.9
55°	551.2	543.6	536.1	533.2	537.0
57.5°	515.2	506.7	496.3	496.3	502.0
60°	476.4	467.9	457.5	458.4	464.1
62.5°	434.7	429.0	414.8	418.6	424.3
65°	394.9	386.4	374.1	377.9	383.6
67.5°	352.3	344.7	333.4	334.3	337.2
70°	309.7	300.2	293.6	287.0	287.0
72.5°	265.2	257.6	250.0	232.0	228.3
75°	220.7	214.0	204.6	175.2	167.6
77.5°	177.1	172.4	154.4	126.9	124.1
80°	131.6	130.7	107.0	104.2	104.2
82.5°	90.9	87.1	81.5	75.8	72.9
85°	54.0	48.3	48.3	45.5	43.6
87.5°	17.0	19.9	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)