

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: P393411

Luminaire Tested: **24EN-LD2-30-UNV-L82765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393411  
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 (3000K)  
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: 2802.1 lumens  
Efficiency: N/A  
Efficacy: 134.1 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

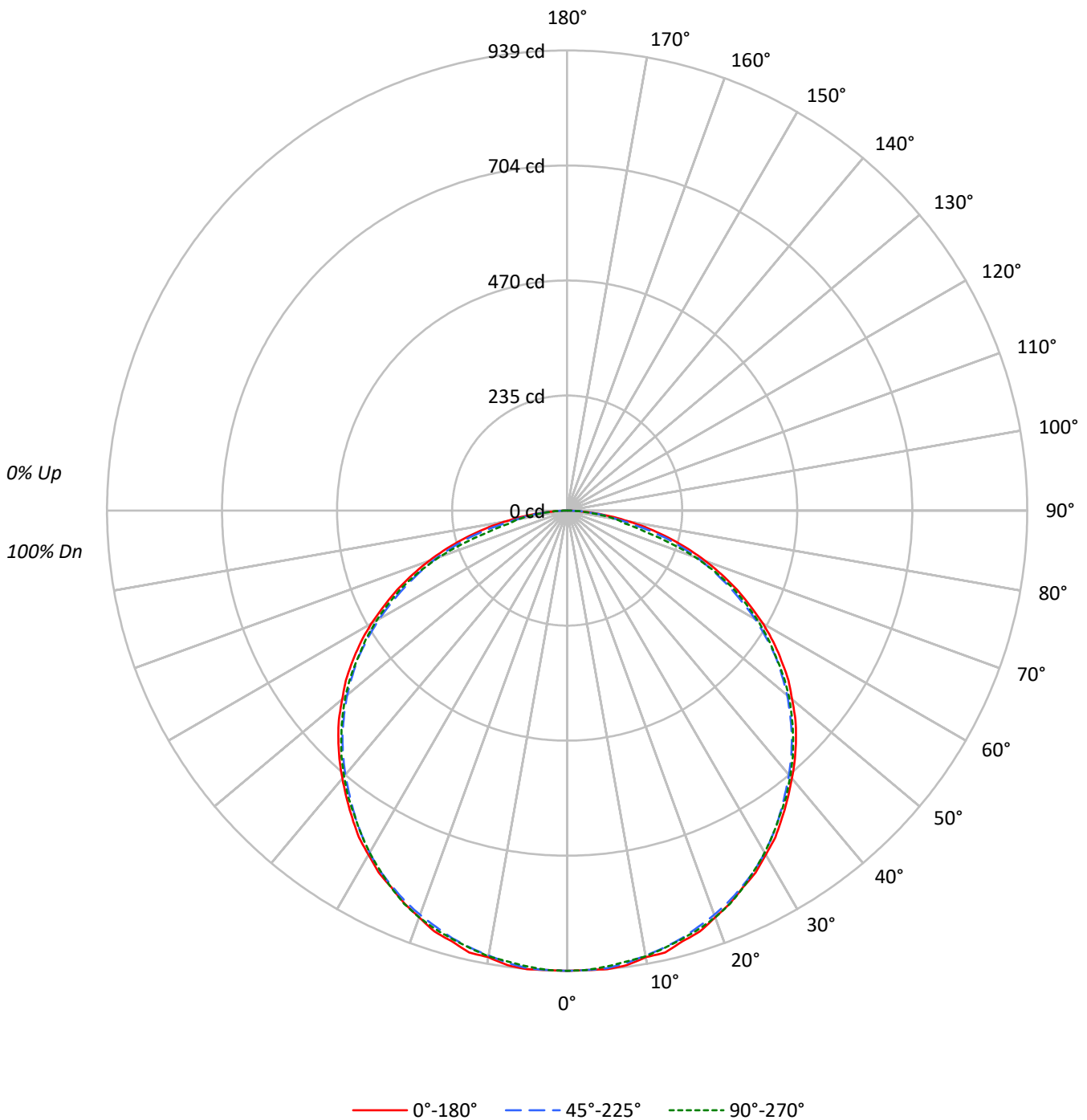
Input Watts (W): 20.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1264	1264	1264
5°	1269	1266	1261
10°	1264	1259	1262
15°	1267	1259	1261
20°	1265	1257	1265
25°	1260	1256	1261
30°	1260	1253	1253
35°	1257	1243	1244
40°	1253	1237	1244
45°	1257	1234	1241
50°	1254	1227	1236
55°	1252	1218	1220
60°	1242	1192	1209
65°	1218	1153	1183
70°	1180	1118	1093
75°	1111	1030	844
80°	988	803	782
85°	807	722	651



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.0	3.2
10°-20°	255.4	9.1
20°-30°	390.2	13.9
30°-40°	475.7	17.0
40°-50°	502.1	17.9
50°-60°	466.1	16.6
60°-70°	365.1	13.0
70°-80°	204.1	7.3
80°-90°	54.4	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°	734.7	26.2
0°-40°	1210.4	43.2
0°-60°	2178.6	77.7
0°-90°	2802.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2802.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	939	939	939	939	939	
5°	939	938	937	937	934	89
15°	910	904	904	902	905	257
25°	848	848	846	843	849	392
35°	765	762	757	760	758	479
45°	660	653	648	645	652	509
55°	534	526	519	516	520	477
65°	382	374	362	366	372	378
75°	214	207	198	170	162	226
85°	52	47	47	44	42	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	939.2	939.2	939.2	939.2	939.2
2.5°	938.3	940.1	938.3	936.5	938.3
5°	939.2	938.3	937.4	937.4	933.7
7.5°	935.6	933.7	931.0	931.9	928.2
10°	925.5	925.5	921.8	924.6	923.6
12.5°	923.6	914.5	913.6	914.5	914.5
15°	909.9	904.4	903.5	902.5	905.3
17.5°	900.7	891.5	890.6	888.8	895.2
20°	883.3	877.8	877.8	875.0	883.3
22.5°	867.7	862.2	863.1	859.4	868.6
25°	848.4	847.5	845.7	842.9	849.3
27.5°	832.8	829.2	828.2	825.5	827.3
30°	810.8	809.9	806.2	805.3	806.2
32.5°	790.6	787.9	782.4	783.3	782.4
35°	765.0	762.2	756.7	759.5	757.6
37.5°	739.3	736.5	730.1	732.9	734.7
40°	713.6	709.9	704.4	707.2	708.1
42.5°	687.9	681.5	676.9	675.1	681.5
45°	660.4	653.1	648.5	644.8	652.1
47.5°	632.0	623.7	617.3	615.5	621.9
50°	598.9	592.5	586.1	583.4	590.7
52.5°	569.6	559.5	552.2	550.3	556.8
55°	533.8	526.5	519.1	516.4	520.1
57.5°	499.0	490.7	480.6	480.6	486.1
60°	461.4	453.1	443.0	443.9	449.4
62.5°	421.0	415.5	401.7	405.4	410.9
65°	382.5	374.2	362.3	366.0	371.5
67.5°	341.2	333.9	322.9	323.8	326.5
70°	299.9	290.8	284.3	277.9	277.9
72.5°	256.8	249.5	242.1	224.7	221.0
75°	213.7	207.3	198.1	169.7	162.3
77.5°	171.5	166.9	149.5	122.9	120.2
80°	127.5	126.6	103.6	100.9	100.9
82.5°	88.1	84.4	78.9	73.4	70.6
85°	52.3	46.8	46.8	44.0	42.2
87.5°	16.5	19.3	19.3	19.3	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)