

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: P393470

Luminaire Tested: **24EN-LD2-34-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393470  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-34-UNV-L93050-W2A-1-U (4500K)  
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3038.7 lumens  
Efficiency: N/A  
Efficacy: 130.4 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

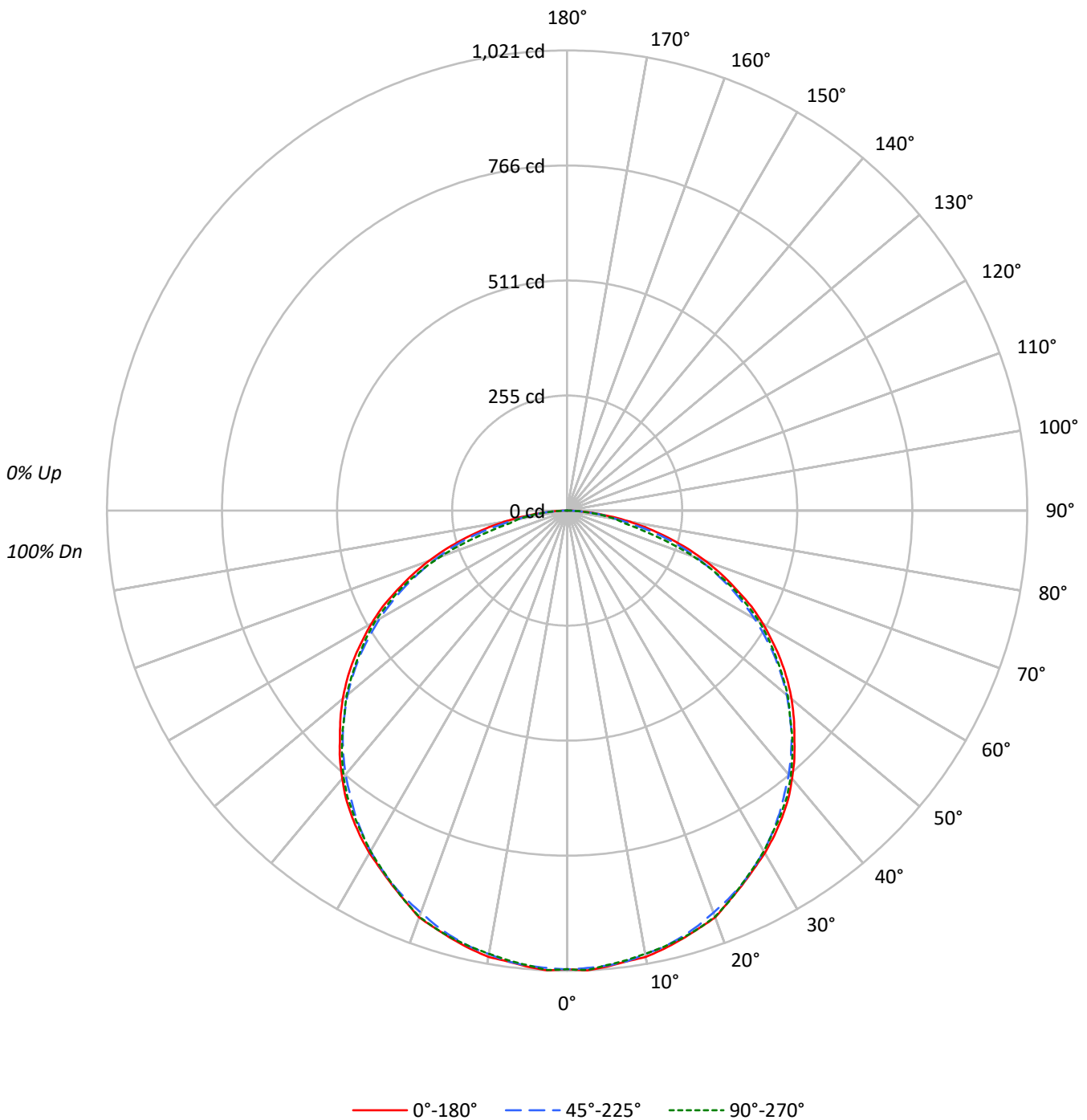
Input Watts (W): 23.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	79	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	41	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	35	29	25	23

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

	0°	45°	90°
0°	1369	1369	1369
5°	1372	1369	1367
10°	1374	1365	1364
15°	1371	1365	1369
20°	1375	1359	1373
25°	1362	1360	1360
30°	1363	1356	1356
35°	1366	1349	1356
40°	1363	1343	1356
45°	1357	1340	1343
50°	1360	1331	1338
55°	1358	1316	1327
60°	1349	1292	1323
65°	1320	1258	1289
70°	1285	1206	1178
75°	1205	1114	927
80°	1082	871	857
85°	854	786	718



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.4	3.2
10°-20°	276.8	9.1
20°-30°	422.3	13.9
30°-40°	515.3	17.0
40°-50°	545.2	17.9
50°-60°	505.3	16.6
60°-70°	396.9	13.1
70°-80°	221.4	7.3
80°-90°	59.2	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°	795.5	26.2
0°-40°	1310.8	43.1
0°-60°	2361.3	77.7
0°-90°	3038.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3038.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1018	1018	1018	1018	1018	
5°	1016	1015	1013	1012	1012	97
15°	984	982	980	977	983	278
25°	918	916	916	914	916	424
35°	832	825	821	819	825	520
45°	713	710	704	704	706	551
55°	579	569	561	560	566	517
65°	414	407	395	398	405	411
75°	232	223	214	187	178	245
85°	55	51	51	47	46	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1017.7	1017.7	1017.7	1017.7	1017.7
2.5°	1021.2	1017.7	1015.9	1017.7	1020.3
5°	1015.9	1015.1	1013.3	1012.4	1012.4
7.5°	1008.9	1010.7	1008.9	1006.3	1006.3
10°	1005.4	1003.6	999.3	998.4	998.4
12.5°	995.7	993.1	991.4	987.8	991.4
15°	984.3	981.7	979.9	977.3	982.6
17.5°	972.0	965.9	965.9	965.9	972.0
20°	960.6	951.8	949.2	951.0	958.9
22.5°	937.8	934.3	933.4	935.2	938.7
25°	917.6	915.8	915.8	914.1	915.8
27.5°	896.5	896.5	894.8	893.0	893.9
30°	877.2	874.6	872.8	871.1	872.8
32.5°	855.3	850.9	847.3	846.5	848.2
35°	831.5	825.4	821.0	819.3	825.4
37.5°	806.1	797.3	792.0	792.0	800.8
40°	776.2	766.6	764.8	763.9	771.8
42.5°	746.4	739.3	735.0	735.8	739.3
45°	713.0	710.4	704.2	704.2	706.0
47.5°	682.3	678.8	670.0	671.7	670.0
50°	649.8	643.6	635.7	633.1	639.2
52.5°	615.5	608.5	598.9	597.1	602.4
55°	578.7	569.0	561.1	560.2	565.5
57.5°	540.0	530.4	520.7	520.7	529.5
60°	501.4	491.7	480.3	480.3	491.7
62.5°	461.0	450.5	438.2	440.8	447.8
65°	414.5	406.6	395.1	397.8	404.8
67.5°	371.4	362.6	350.4	353.9	353.9
70°	326.6	315.2	306.5	301.2	299.4
72.5°	279.2	269.6	263.4	244.1	238.8
75°	231.8	223.0	214.3	187.0	178.3
77.5°	186.2	180.0	162.4	133.5	130.0
80°	139.6	137.0	112.4	110.6	110.6
82.5°	94.8	93.1	84.3	79.9	79.0
85°	55.3	50.9	50.9	47.4	46.5
87.5°	19.3	20.2	22.0	21.1	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)