

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: P393469

Luminaire Tested: **24EN-LD2-34-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393469  
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 (4000K)  
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: 3022.9 lumens  
Efficiency: N/A  
Efficacy: 128.6 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

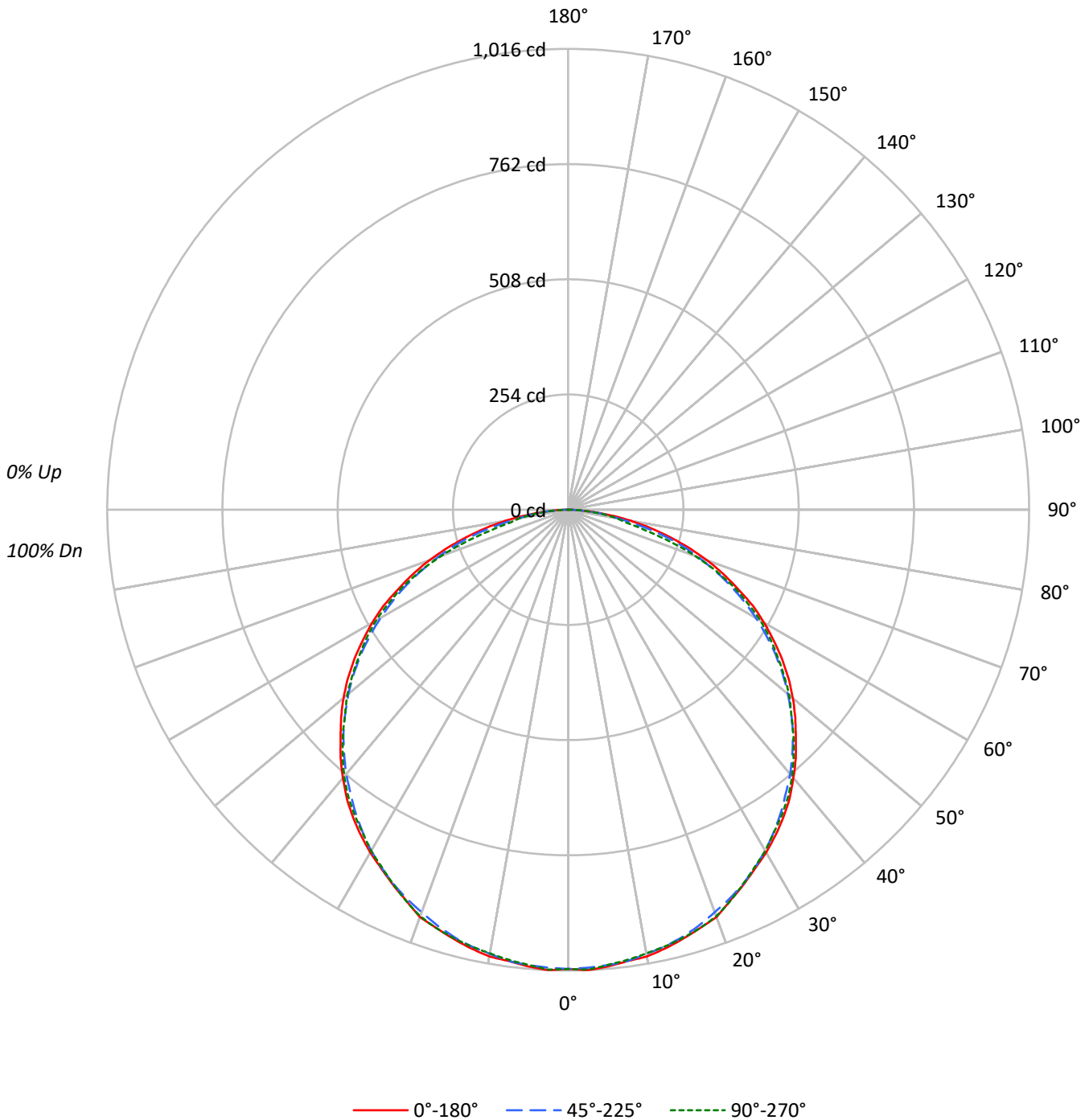
Input Watts (W): 23.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1362	1362	1362
5°	1365	1361	1360
10°	1367	1358	1357
15°	1364	1358	1362
20°	1368	1352	1366
25°	1355	1353	1353
30°	1356	1349	1349
35°	1359	1341	1349
40°	1356	1336	1349
45°	1350	1333	1336
50°	1353	1324	1331
55°	1350	1309	1320
60°	1342	1286	1316
65°	1313	1252	1282
70°	1278	1199	1172
75°	1199	1108	922
80°	1076	866	853
85°	849	783	715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.9	3.2
10°-20°	275.4	9.1
20°-30°	420.1	13.9
30°-40°	512.6	17.0
40°-50°	542.3	17.9
50°-60°	502.7	16.6
60°-70°	394.8	13.1
70°-80°	220.3	7.3
80°-90°	58.9	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°	791.4	26.2
0°-40°	1304.0	43.1
0°-60°	2349.0	77.7
0°-90°	3022.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3022.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1012	1012	1012	1012	1012	
5°	1011	1010	1008	1007	1007	96
15°	979	977	975	972	978	277
25°	913	911	911	909	911	421
35°	827	821	817	815	821	517
45°	709	707	701	701	702	548
55°	576	566	558	557	562	514
65°	412	404	393	396	403	409
75°	231	222	213	186	177	244
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°	1012.4	1012.4	1012.4	1012.4	1012.4
2.5°	1015.9	1012.4	1010.6	1012.4	1015.0
5°	1010.6	1009.8	1008.0	1007.2	1007.2
7.5°	1003.7	1005.4	1003.7	1001.0	1001.0
10°	1000.2	998.4	994.1	993.2	993.2
12.5°	990.6	987.9	986.2	982.7	986.2
15°	979.2	976.6	974.8	972.2	977.5
17.5°	967.0	960.9	960.9	960.9	967.0
20°	955.6	946.9	944.3	946.0	953.9
22.5°	932.9	929.4	928.5	930.3	933.8
25°	912.8	911.1	911.1	909.3	911.1
27.5°	891.9	891.9	890.1	888.4	889.2
30°	872.6	870.0	868.3	866.5	868.3
32.5°	850.8	846.4	842.9	842.1	843.8
35°	827.2	821.1	816.7	815.0	821.1
37.5°	801.9	793.1	787.9	787.9	796.6
40°	772.2	762.6	760.8	760.0	767.8
42.5°	742.5	735.5	731.1	732.0	735.5
45°	709.3	706.7	700.6	700.6	702.3
47.5°	678.7	675.2	666.5	668.2	666.5
50°	646.4	640.3	632.4	629.8	635.9
52.5°	612.3	605.3	595.7	594.0	599.2
55°	575.6	566.0	558.2	557.3	562.5
57.5°	537.2	527.6	518.0	518.0	526.7
60°	498.8	489.2	477.8	477.8	489.2
62.5°	458.6	448.1	435.9	438.5	445.5
65°	412.3	404.4	393.1	395.7	402.7
67.5°	369.5	360.8	348.5	352.0	352.0
70°	324.9	313.6	304.9	299.6	297.9
72.5°	277.8	268.2	262.1	242.8	237.6
75°	230.6	221.9	213.1	186.1	177.3
77.5°	185.2	179.1	161.6	132.8	129.3
80°	138.9	136.3	111.8	110.1	110.1
82.5°	94.3	92.6	83.9	79.5	78.6
85°	55.0	50.7	50.7	47.2	46.3
87.5°	19.2	20.1	21.8	21.0	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)