

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: P393491

Luminaire Tested: **24EN-LD2-40-UNV-L92765-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393491  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-40-UNV-L92765-W2A-1-U (3000K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3135.9 lumens  
Efficiency: N/A  
Efficacy: 112.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

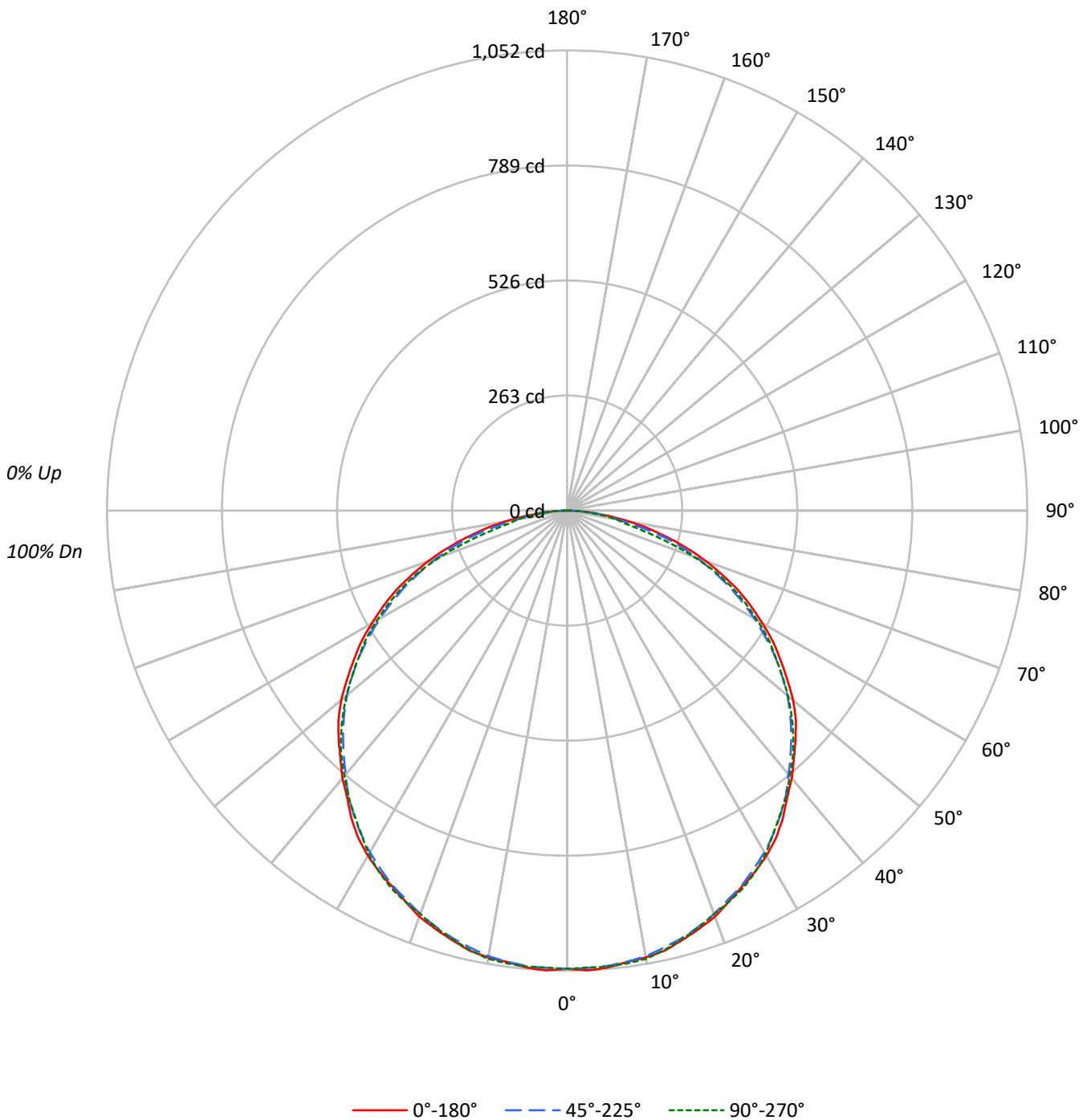
Input Watts (W): 27.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1409	1409	1409
5°	1417	1412	1414
10°	1417	1413	1422
15°	1416	1409	1413
20°	1414	1405	1405
25°	1407	1403	1414
30°	1416	1401	1408
35°	1411	1396	1394
40°	1403	1383	1391
45°	1405	1379	1392
50°	1411	1376	1379
55°	1396	1360	1362
60°	1387	1331	1352
65°	1375	1294	1323
70°	1325	1240	1206
75°	1239	1155	942
80°	1103	893	882
85°	872	824	741



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.4	3.2
10°-20°	285.9	9.1
20°-30°	436.5	13.9
30°-40°	532.5	17.0
40°-50°	562.3	17.9
50°-60°	521.3	16.6
60°-70°	408.4	13.0
70°-80°	228.6	7.3
80°-90°	61.0	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°	821.8	26.2
0°-40°	1354.3	43.2
0°-60°	2437.9	77.7
0°-90°	3135.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3135.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1047	1047	1047	1047	1047	
5°	1049	1049	1045	1046	1047	100
15°	1016	1012	1012	1010	1014	287
25°	948	948	945	944	952	438
35°	859	852	850	849	848	537
45°	738	732	725	723	732	570
55°	595	588	580	580	581	533
65°	432	419	406	409	416	425
75°	238	232	222	193	181	253
85°	56	54	53	50	48	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1047.4	1047.4	1047.4	1047.4	1047.4
2.5°	1052.1	1049.8	1046.7	1047.4	1045.9
5°	1049.0	1049.0	1045.1	1045.9	1046.7
7.5°	1041.2	1042.0	1040.5	1037.4	1044.3
10°	1037.4	1031.9	1034.3	1028.1	1040.5
12.5°	1030.4	1021.9	1023.4	1018.8	1028.8
15°	1016.5	1011.8	1011.8	1009.5	1014.1
17.5°	1002.5	999.4	997.9	999.4	999.4
20°	987.8	985.5	981.6	984.7	981.6
22.5°	966.9	968.5	962.3	969.2	967.7
25°	947.6	947.6	945.2	943.7	952.2
27.5°	930.5	925.1	923.6	920.5	931.3
30°	911.2	901.1	901.9	897.2	906.5
32.5°	888.0	876.3	877.1	872.5	876.3
35°	859.3	851.6	850.0	849.2	848.5
37.5°	826.0	825.2	821.4	823.7	822.2
40°	798.9	797.4	787.3	789.6	792.0
42.5°	767.2	764.9	756.3	757.9	764.1
45°	738.5	731.6	724.6	723.1	731.6
47.5°	709.1	698.3	692.1	687.4	696.0
50°	674.3	665.0	657.3	652.6	658.8
52.5°	634.0	626.3	618.5	617.0	619.3
55°	595.3	587.6	579.8	579.8	580.6
57.5°	558.2	548.1	536.5	538.8	545.0
60°	515.6	506.3	494.7	494.7	502.4
62.5°	473.8	462.2	450.6	452.1	459.8
65°	432.0	418.8	406.4	408.8	415.7
67.5°	384.0	372.4	360.8	363.9	367.7
70°	336.8	325.1	315.1	312.0	306.6
72.5°	288.8	279.5	271.0	253.9	245.4
75°	238.4	231.5	222.2	192.8	181.2
77.5°	192.0	186.6	165.7	138.6	134.7
80°	142.4	142.4	115.3	113.0	113.8
82.5°	96.8	95.2	87.5	82.1	79.7
85°	56.5	54.2	53.4	50.3	48.0
87.5°	18.6	21.7	21.7	20.9	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)