

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: P35072

Luminaire Tested: **24ENA-LD2-45HP-UNV-L835-CD1-U**

Test Date: 09/22/16

Test Information

Test Method: LM-79-08
Report Number: P35072
Test Lab: INNOVATION CENTER-P3
Test Date: 09/22/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ENA-LD2-45HP-UNV-L835-CD1-U
Description: ENCOUNTER AIR 2X4 LED TROFFER
Light Source: (308) EATON 3500K LEDS
EL236N077E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 740 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4451.6 lumens
Efficiency: N/A
Efficacy: 134.9 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.41 / 1.43
Luminous Opening: Rectangular (W 1.79' x L: 3.83' x H: 0')
CIE Type: Direct

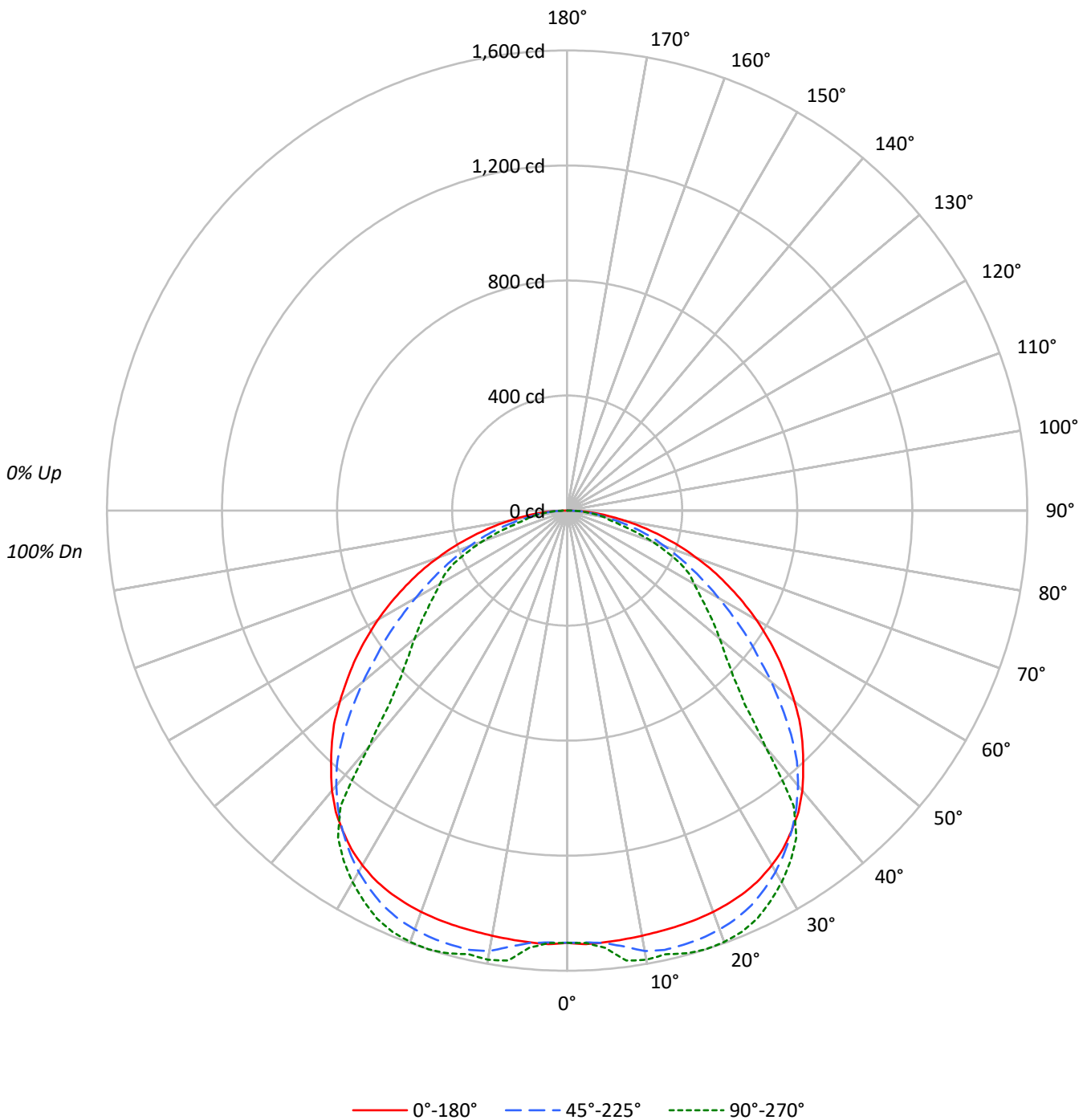
Input Watts (W): 33
Input Voltage (V): 120.0
Input Current (Ain): 0.276
Voltage Rise (V): NR
Power Factor: 0.9991
Total Harmonic Distortion (THDi): 7.82%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.9
Test Distance: 25 FT



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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	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	66	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2356	2356	2356
5°	2371	2374	2401
10°	2389	2475	2524
15°	2426	2536	2586
20°	2477	2585	2662
25°	2532	2620	2706
30°	2577	2624	2700
35°	2602	2604	2658
40°	2602	2555	2197
45°	2567	2440	1811
50°	2516	2260	1687
55°	2454	2085	1615
60°	2382	1909	1599
65°	2292	1769	1609
70°	2186	1650	1443
75°	2035	1514	1163
80°	1832	1246	1173
85°	1780	1277	1169



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	3.3
10°-20°	439.1	9.9
20°-30°	696.8	15.7
30°-40°	848.0	19.0
40°-50°	803.6	18.1
50°-60°	669.0	15.0
60°-70°	493.3	11.1
70°-80°	273.0	6.1
80°-90°	83.1	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°	1281.6	28.8
0°-40°	2129.6	47.8
0°-60°	3602.2	80.9
0°-90°	4451.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4451.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1503	1503	1503	1503	1503	
5°	1507	1503	1509	1515	1526	144
15°	1495	1518	1563	1578	1594	423
25°	1464	1480	1515	1547	1565	675
35°	1360	1345	1361	1383	1389	850
45°	1158	1121	1101	941	817	893
55°	898	854	763	626	591	802
65°	618	569	477	424	434	613
75°	336	296	250	204	192	358
85°	99	78	71	66	65	106
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1503	1503	1503	1503	1503
2.5°	1509	1503	1503	1501	1505
5°	1507	1503	1509	1515	1526
7.5°	1504	1505	1529	1560	1578
10°	1501	1511	1555	1581	1586
12.5°	1498	1516	1565	1573	1580
15°	1495	1518	1563	1578	1594
17.5°	1491	1516	1559	1581	1600
20°	1485	1510	1550	1578	1596
22.5°	1476	1499	1536	1567	1586
25°	1464	1480	1515	1547	1565
27.5°	1447	1457	1485	1515	1531
30°	1424	1427	1450	1477	1492
32.5°	1396	1389	1408	1435	1445
35°	1360	1345	1361	1383	1389
37.5°	1321	1295	1308	1311	1294
40°	1272	1240	1249	1191	1074
42.5°	1215	1182	1183	1055	915
45°	1158	1121	1101	941	817
47.5°	1099	1059	1012	846	747
50°	1032	992	927	761	692
52.5°	963	923	838	691	641
55°	898	854	763	626	591
57.5°	829	783	683	567	547
60°	760	714	609	518	510
62.5°	689	639	540	472	480
65°	618	569	477	424	434
67.5°	550	500	417	377	373
70°	477	427	360	319	315
72.5°	409	363	308	263	253
75°	336	296	250	204	192
77.5°	271	243	193	154	150
80°	203	193	138	127	130
82.5°	148	138	105	96	97
85°	99	78	71	66	65
87.5°	42	39	37	36	37
90°	0	0	0	0	0

(END OF REPORT)