

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: P238959

Luminaire Tested: **24EN-LD2-30-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238959
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-30-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2807.6 lumens
Efficiency: N/A
Efficacy: 114.1 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

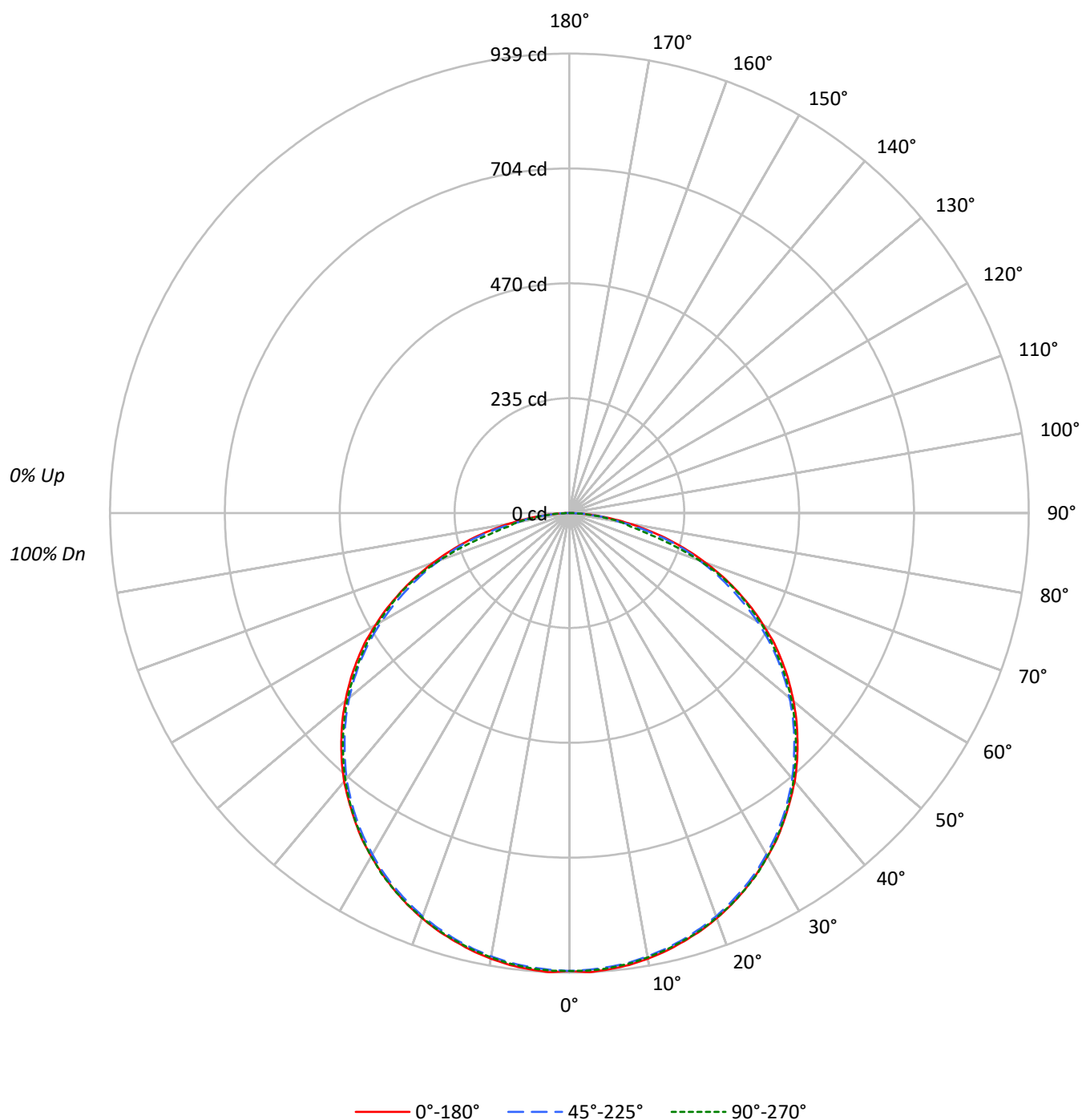
Input Watts (W): 24.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	84	79	74	81	77	73	78	74	71	69			
3	90	79	70	64	87	77	69	63	74	67	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°	1433	1433	1433
5°	1439	1431	1435
10°	1438	1431	1434
15°	1436	1430	1433
20°	1436	1429	1434
25°	1434	1428	1434
30°	1433	1424	1433
35°	1431	1422	1429
40°	1432	1417	1425
45°	1428	1408	1418
50°	1424	1399	1412
55°	1419	1385	1399
60°	1402	1359	1387
65°	1374	1316	1365
70°	1324	1269	1266
75°	1246	1191	1007
80°	1097	931	957
85°	866	814	752



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.6	3.2
10°-20°	254.9	9.1
20°-30°	390.0	13.9
30°-40°	476.7	17.0
40°-50°	503.8	17.9
50°-60°	466.8	16.6
60°-70°	365.7	13.0
70°-80°	206.7	7.4
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°	733.5	26.1
0°-40°	1210.2	43.1
0°-60°	2180.8	77.7
0°-90°	2807.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2807.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	936	936	936	936	936	
5°	936	933	931	930	933	89
15°	906	902	902	901	904	256
25°	849	845	845	845	849	391
35°	766	762	760	760	764	479
45°	659	655	650	650	655	509
55°	532	526	519	520	524	475
65°	379	372	363	368	377	375
75°	211	205	201	180	170	222
85°	49	46	46	44	43	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	935.7	935.7	935.7	935.7	935.7
2.5°	939.2	935.1	933.9	932.7	935.7
5°	935.7	932.7	931.0	930.4	933.3
7.5°	931.6	928.0	926.9	925.7	928.6
10°	924.5	921.0	919.8	919.2	922.2
12.5°	916.3	912.2	911.6	911.0	914.0
15°	905.7	902.2	901.6	901.0	904.0
17.5°	894.6	891.1	889.9	889.3	893.4
20°	881.1	877.6	877.0	876.4	879.9
22.5°	865.8	862.3	861.2	861.7	865.3
25°	848.8	845.3	844.7	844.7	848.8
27.5°	830.1	826.5	826.5	826.5	831.2
30°	810.1	807.2	805.4	806.0	810.1
32.5°	789.6	784.9	783.7	784.3	788.4
35°	765.5	762.0	760.3	760.3	764.4
37.5°	740.9	737.4	735.0	735.0	739.1
40°	716.3	711.0	708.6	707.5	712.7
42.5°	688.7	684.6	679.3	679.3	684.0
45°	659.4	654.7	650.0	650.0	654.7
47.5°	629.4	624.7	619.5	619.5	624.2
50°	597.8	593.1	587.2	587.2	592.5
52.5°	565.5	560.2	553.8	553.2	558.5
55°	531.5	525.6	518.6	519.7	523.9
57.5°	496.9	489.2	482.2	482.2	488.7
60°	457.6	451.1	443.5	444.7	452.9
62.5°	420.0	411.8	404.2	407.1	414.2
65°	379.0	371.9	363.1	367.8	376.6
67.5°	338.5	330.9	323.8	329.7	333.8
70°	295.7	288.6	283.3	283.3	282.8
72.5°	252.8	246.4	245.2	234.1	227.0
75°	210.6	204.7	201.2	179.5	170.1
77.5°	166.6	164.8	153.7	130.8	127.9
80°	124.4	125.5	105.6	106.2	108.5
82.5°	85.6	83.9	79.2	75.7	74.5
85°	49.3	46.3	46.3	44.0	42.8
87.5°	16.4	18.2	18.2	18.2	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)