

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: P238849

Luminaire Tested: **22EN-LD2-43-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238849  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-43-UNV-L930-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
STANDARD OPTION  
Light Source: (168)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3753.7 lumens  
Efficiency: N/A  
Efficacy: 98.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

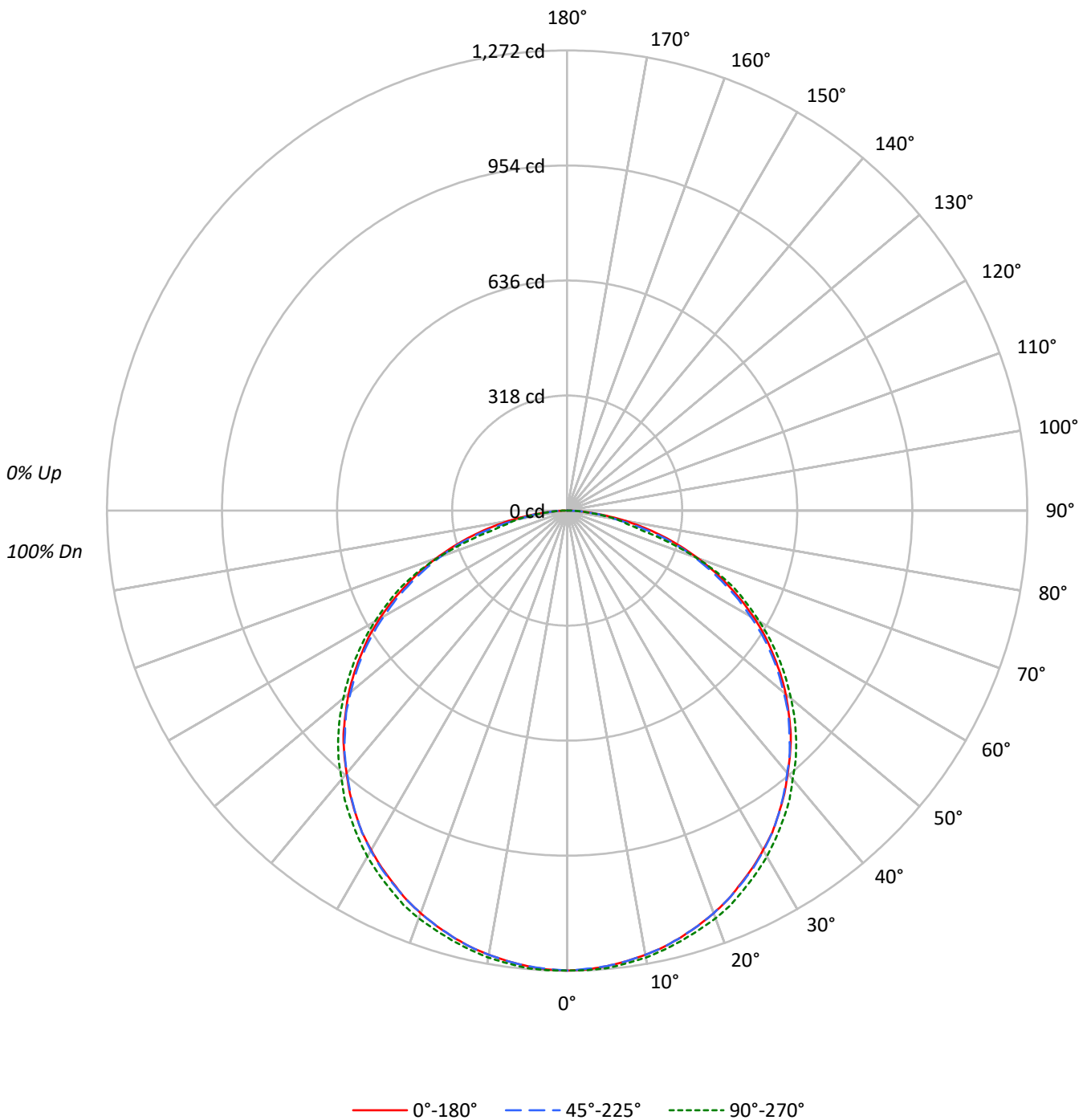
Input Watts (W): 38.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	4072	4072	4072
5°	4063	4063	4082
10°	4055	4055	4079
15°	4046	4046	4077
20°	4036	4036	4088
25°	4017	4023	4084
30°	4006	4013	4084
35°	3990	3990	4072
40°	3965	3957	4053
45°	3960	3934	4055
50°	3930	3892	4025
55°	3884	3842	3990
60°	3835	3749	3932
65°	3731	3630	3874
70°	3596	3488	3542
75°	3387	3175	2705
80°	2980	2490	2595
85°	2164	2094	2025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.3	3.2
10°-20°	345.2	9.2
20°-30°	527.0	14.0
30°-40°	641.8	17.1
40°-50°	675.6	18.0
50°-60°	622.0	16.6
60°-70°	484.1	12.9
70°-80°	268.7	7.2
80°-90°	69.0	1.8
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°	992.4	26.4
0°-40°	1634.2	43.5
0°-60°	2931.8	78.1
0°-90°	3753.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3753.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1272	1272	1272	1272	1272	
5°	1264	1264	1264	1268	1270	120
15°	1220	1220	1220	1226	1230	345
25°	1137	1139	1139	1148	1156	525
35°	1021	1021	1021	1032	1042	639
45°	874	869	869	882	895	673
55°	696	694	688	700	715	623
65°	492	487	479	494	511	488
75°	274	268	257	228	219	288
85°	59	55	57	55	55	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1271.6	1271.6	1271.6	1271.6	1271.6
2.5°	1269.7	1267.8	1267.8	1271.6	1271.6
5°	1264.0	1264.0	1264.0	1267.8	1269.7
7.5°	1256.4	1256.4	1256.4	1262.1	1262.1
10°	1246.9	1245.0	1246.9	1250.7	1254.5
12.5°	1235.5	1233.6	1235.5	1239.3	1243.1
15°	1220.3	1220.3	1220.3	1226.0	1229.8
17.5°	1203.2	1201.3	1203.2	1208.9	1214.6
20°	1184.2	1184.2	1184.2	1191.8	1199.4
22.5°	1163.3	1161.4	1163.3	1172.8	1180.4
25°	1136.7	1138.6	1138.6	1148.1	1155.7
27.5°	1111.9	1110.0	1113.8	1121.4	1130.9
30°	1083.4	1083.4	1085.3	1094.8	1104.3
32.5°	1054.9	1053.0	1054.9	1064.4	1073.9
35°	1020.7	1020.7	1020.7	1032.1	1041.6
37.5°	986.5	984.6	984.6	996.0	1009.3
40°	948.5	946.6	946.6	959.9	969.4
42.5°	912.4	910.5	910.5	921.9	935.2
45°	874.3	868.6	868.6	882.0	895.3
47.5°	830.6	826.8	828.7	840.1	853.4
50°	788.8	783.1	781.2	794.5	807.8
52.5°	743.2	741.3	735.6	747.0	762.2
55°	695.7	693.8	688.1	699.5	714.7
57.5°	650.1	644.4	638.7	648.2	665.3
60°	598.7	593.0	585.4	598.7	613.9
62.5°	547.4	539.8	534.1	545.5	562.6
65°	492.3	486.6	479.0	494.2	511.3
67.5°	441.0	435.3	425.8	439.1	450.5
70°	384.0	376.3	372.5	374.4	378.3
72.5°	328.8	325.0	319.3	304.1	300.3
75°	273.7	268.0	256.6	228.1	218.6
77.5°	218.6	214.8	193.9	169.2	169.2
80°	161.6	159.7	135.0	138.8	140.7
82.5°	110.2	106.4	98.8	96.9	96.9
85°	58.9	55.1	57.0	55.1	55.1
87.5°	22.8	22.8	24.7	22.8	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)