

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: P35073

Luminaire Tested: **12ENA-LD2-35-HP-UNV-L835-CD1-U**

Test Date: 10/05/16

Test Information

Test Method: LM-79-08
Report Number: P35073
Test Lab: INNOVATION CENTER-P3
Test Date: 10/05/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12ENA-LD2-35-HP-UNV-L835-CD1-U
Description: ENCOUNTER AIR 1X2 LED TROFFER
Light Source: (196) EATON 3500K LEDS
EL232N098E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 680 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3250.8 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 1.43 / 1.38 / 1.42
Luminous Opening: Rectangular (W 0.79' x L: 1.83' x H: 0')
CIE Type: Direct

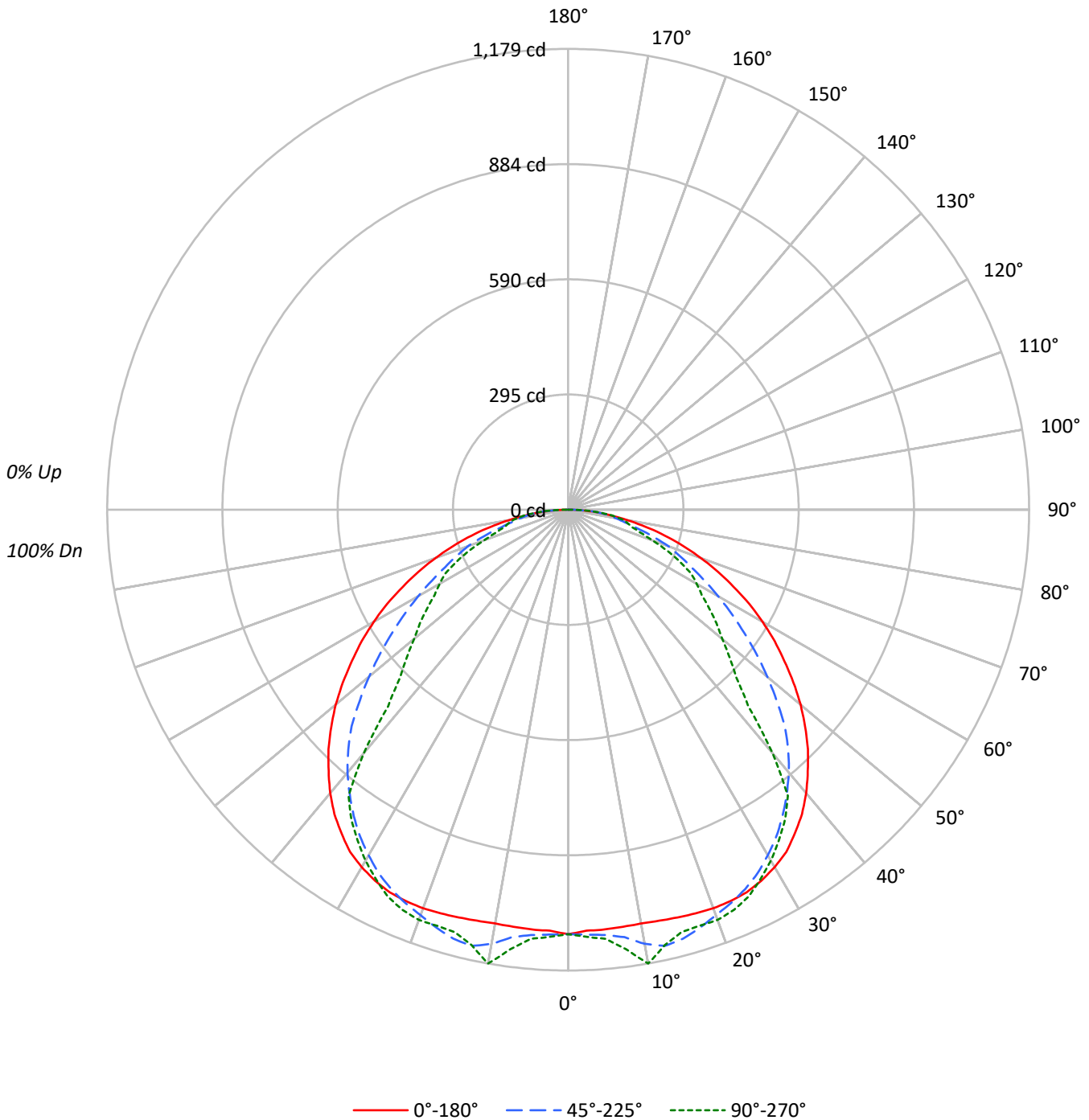
Input Watts (W): 41.5
Input Voltage (V): 120.0
Input Current (Ain): 0.347
Voltage Rise (V): NR
Power Factor: 0.9996
Total Harmonic Distortion (THDi): 7.95%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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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	94	97	94	91	94	91	88	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8054	8054	8054
5°	8025	8130	8204
10°	8095	8495	8879
15°	8292	8722	8592
20°	8563	8713	8816
25°	8838	8764	8936
30°	9043	8743	8880
35°	9153	8655	8755
40°	9168	8500	7881
45°	9093	8212	6377
50°	8953	7673	5930
55°	8728	7099	5689
60°	8514	6571	5636
65°	8195	6089	5528
70°	7828	5898	4944
75°	7336	5215	4785
80°	6577	5210	5937
85°	5871	6382	6722



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	3.2
10°-20°	316.1	9.7
20°-30°	496.5	15.3
30°-40°	605.2	18.6
40°-50°	585.3	18.0
50°-60°	491.1	15.1
60°-70°	363.5	11.2
70°-80°	210.7	6.5
80°-90°	77.1	2.4
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°	917.9	28.2
0°-40°	1523.2	46.9
0°-60°	2599.5	80.0
0°-90°	3250.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3250.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1078	1083	1092	1099	1102	103
15°	1080	1105	1136	1123	1119	306
25°	1080	1074	1071	1086	1092	498
35°	1011	975	956	966	967	632
45°	867	813	783	694	608	668
55°	675	618	549	464	440	604
65°	467	412	347	321	315	463
75°	256	218	182	166	167	270
85°	69	65	75	76	79	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1086	1086	1086	1086	1086
2.5°	1078	1082	1088	1092	1094
5°	1078	1083	1092	1099	1102
7.5°	1076	1084	1103	1126	1134
10°	1075	1091	1128	1170	1179
12.5°	1077	1099	1143	1152	1141
15°	1080	1105	1136	1123	1119
17.5°	1083	1103	1121	1112	1116
20°	1085	1096	1104	1107	1117
22.5°	1084	1087	1089	1100	1108
25°	1080	1074	1071	1086	1092
27.5°	1070	1057	1049	1061	1065
30°	1056	1035	1021	1032	1037
32.5°	1038	1007	991	1000	1003
35°	1011	975	956	966	967
37.5°	982	938	918	925	923
40°	947	898	878	857	814
42.5°	907	856	833	771	682
45°	867	813	783	694	608
47.5°	822	765	723	627	560
50°	776	717	665	566	514
52.5°	726	670	607	514	478
55°	675	618	549	464	440
57.5°	626	569	495	420	405
60°	574	517	443	383	380
62.5°	522	464	393	354	355
65°	467	412	347	321	315
67.5°	414	362	309	276	274
70°	361	312	272	234	228
72.5°	308	264	227	195	192
75°	256	218	182	166	167
77.5°	203	178	148	149	155
80°	154	139	122	134	139
82.5°	107	96	103	109	113
85°	69	65	75	76	79
87.5°	32	34	40	43	44
90°	0	0	0	0	0

(END OF REPORT)