

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: P35046

Luminaire Tested: **24EN-LD2-34HP-UNV-L835-CD1-U**

Test Date: 08/25/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35046  
Test Lab: INNOVATION CENTER-P3  
Test Date: 08/25/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-34HP-UNV-L835-CD1-U  
Description: ENCOUNTER 2X4 LED TROFFER  
Light Source: (308) EATON 3500K LEDS  
EL236N077E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 560 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

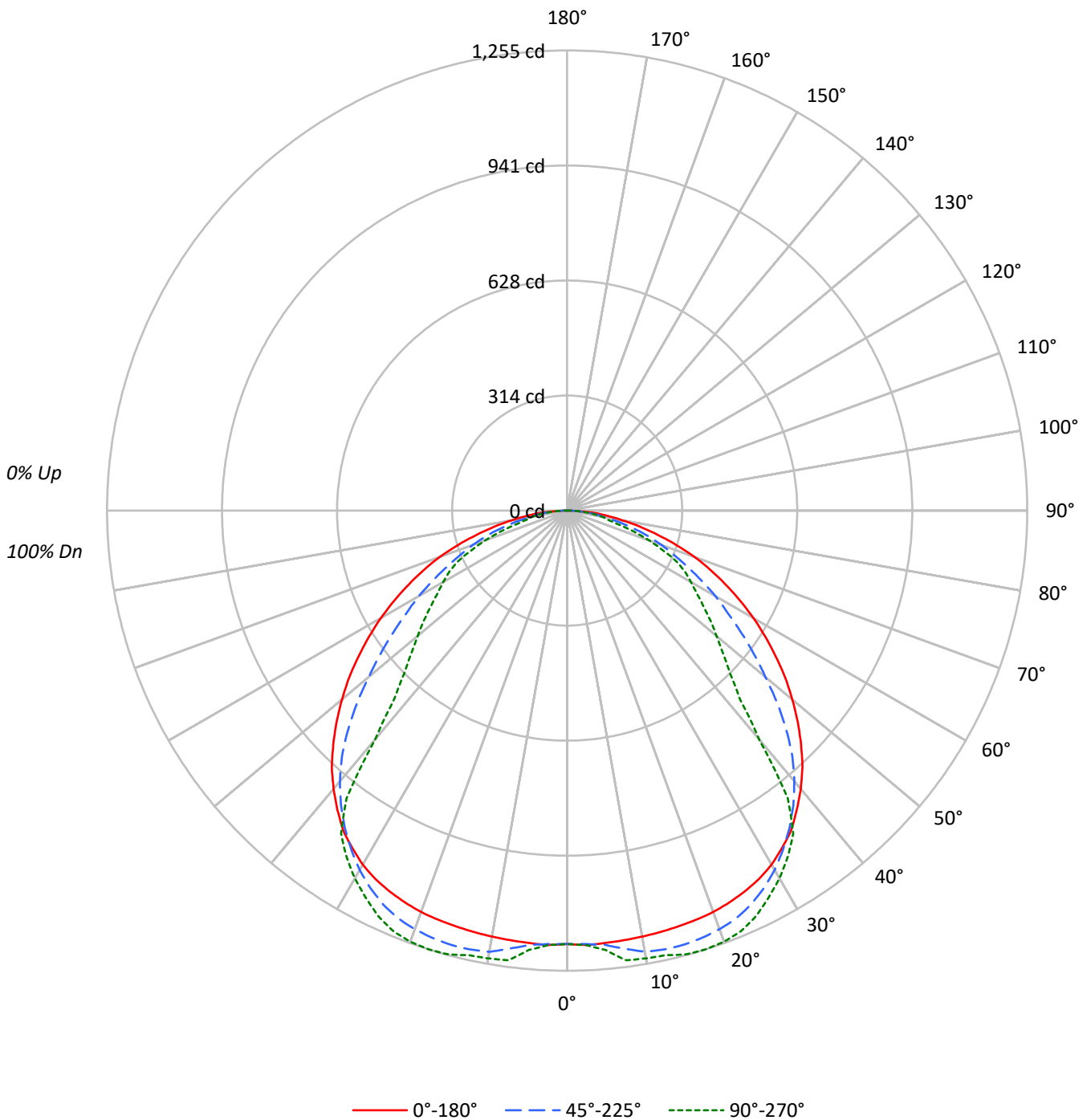
Lumens per Lamp: N/A  
Luminaire Lumens: 3435.7 lumens  
Efficiency: N/A  
Efficacy: 138.0 lumens/watt  
Spacing Criteria (0/90/45): 1.39 / 1.4 / 1.41  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 24.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.209  
Voltage Rise (V): NR  
Power Factor: 0.9981  
Total Harmonic Distortion (THDi): 7.51%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.6  
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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	88	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

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

	0°	45°	90°
0°	1810	1810	1810
5°	1820	1828	1850
10°	1835	1901	1929
15°	1862	1944	1987
20°	1899	1980	2039
25°	1937	2004	2062
30°	1972	2002	2048
35°	1991	1976	2010
40°	1981	1927	1630
45°	1954	1830	1362
50°	1911	1682	1268
55°	1856	1546	1210
60°	1798	1431	1195
65°	1729	1308	1196
70°	1657	1223	1066
75°	1509	1107	834
80°	1350	891	856
85°	1318	861	826



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.6	3.3
10°-20°	344.6	10.0
20°-30°	545.0	15.9
30°-40°	658.1	19.2
40°-50°	619.1	18.0
50°-60°	513.1	14.9
60°-70°	376.2	10.9
70°-80°	205.3	6.0
80°-90°	59.7	1.7
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°	1004.2	29.2
0°-40°	1662.3	48.4
0°-60°	2794.5	81.3
0°-90°	3435.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3435.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1184	1182	1189	1196	1203	113
15°	1174	1192	1226	1240	1253	332
25°	1146	1160	1186	1209	1220	529
35°	1065	1050	1057	1070	1075	664
45°	902	870	845	720	629	695
55°	695	656	579	478	453	622
65°	477	434	361	323	330	472
75°	255	225	187	152	141	272
85°	75	57	49	46	47	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1182	1182	1182	1182	1182
2.5°	1186	1182	1183	1182	1186
5°	1184	1182	1189	1196	1203
7.5°	1182	1185	1205	1228	1237
10°	1180	1189	1222	1236	1240
12.5°	1177	1191	1226	1235	1242
15°	1174	1192	1226	1240	1253
17.5°	1170	1190	1222	1241	1255
20°	1165	1184	1215	1237	1251
22.5°	1157	1175	1204	1227	1241
25°	1146	1160	1186	1209	1220
27.5°	1133	1141	1161	1181	1190
30°	1115	1116	1132	1149	1158
32.5°	1091	1084	1096	1114	1120
35°	1065	1050	1057	1070	1075
37.5°	1029	1009	1013	1006	988
40°	991	966	964	910	815
42.5°	950	917	909	805	698
45°	902	870	845	720	629
47.5°	853	819	777	647	576
50°	802	765	706	584	532
52.5°	750	711	642	530	492
55°	695	656	579	478	453
57.5°	641	600	519	434	418
60°	587	545	467	396	390
62.5°	531	489	412	362	363
65°	477	434	361	323	330
67.5°	423	380	315	284	282
70°	370	325	273	241	238
72.5°	312	274	231	197	190
75°	255	225	187	152	141
77.5°	204	182	144	113	112
80°	153	144	101	94	97
82.5°	112	98	77	70	71
85°	75	57	49	46	47
87.5°	27	25	23	23	24
90°	0	0	0	0	0

(END OF REPORT)