

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: P35329

Luminaire Tested: **24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U**

Test Date: 10/20/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35329  
Test Lab: INNOVATION CENTER-P3  
Test Date: 10/20/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U  
Description: ENCOUNTER AIR 2X4 LED TROFFER WITH SENSOR  
Light Source: (308) EATON 3500K LEDS  
EL236N077E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 1180 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

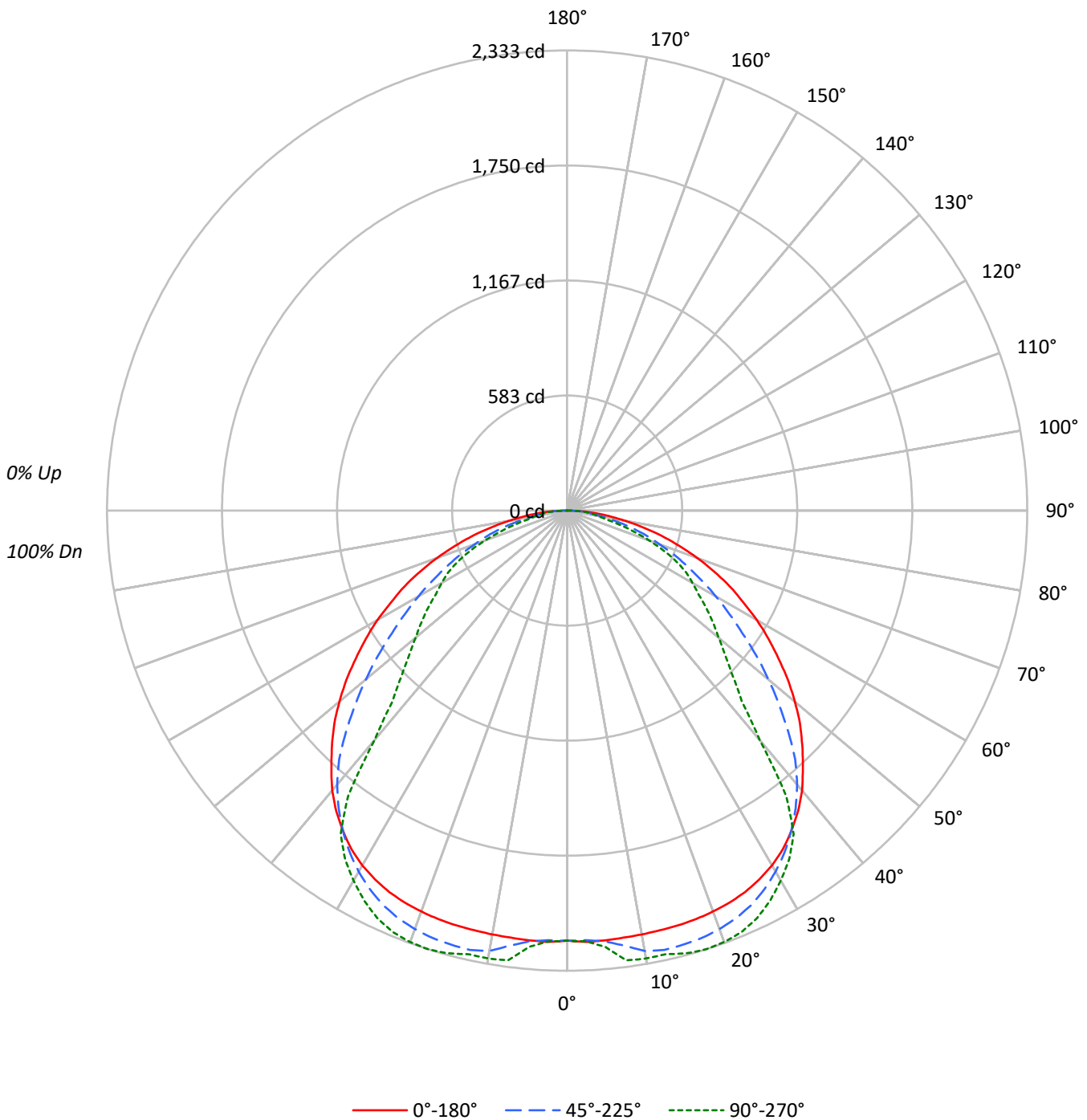
Lumens per Lamp: N/A  
Luminaire Lumens: 6428.3 lumens  
Efficiency: N/A  
Efficacy: 118.6 lumens/watt  
Spacing Criteria (0/90/45): 1.4 / 1.41 / 1.42  
Luminous Opening: Rectangular (W 1.79' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 54.2  
Input Voltage (V): 120.1  
Input Current (Ain): 0.453  
Voltage Rise (V): NR  
Power Factor: 0.9999  
Total Harmonic Distortion (THDi): 8.0%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.3  
Test Distance: 25 FT



TEST NUMBER: P35329

CATALOG NUMBER: 24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P35329

CATALOG NUMBER: 24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U

**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	63	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	53	47	42	52	46	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	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	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	3418	3418	3418
5°	3441	3449	3493
10°	3472	3608	3670
15°	3532	3696	3771
20°	3608	3766	3883
25°	3690	3816	3941
30°	3759	3826	3920
35°	3792	3792	3830
40°	3791	3711	3106
45°	3737	3513	2631
50°	3674	3250	2446
55°	3574	2962	2353
60°	3482	2733	2301
65°	3378	2503	2270
70°	3212	2282	2035
75°	2997	2053	1665
80°	2672	1688	1435
85°	2571	1672	1726



TEST NUMBER: P35329

CATALOG NUMBER: 24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	211.9	3.3
10°-20°	639.9	10.0
20°-30°	1015.7	15.8
30°-40°	1230.4	19.1
40°-50°	1162.8	18.1
50°-60°	967.5	15.1
60°-70°	707.0	11.0
70°-80°	381.5	5.9
80°-90°	111.6	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°	1867.5	29.1
0°-40°	3097.9	48.2
0°-60°	5228.1	81.3
0°-90°	6428.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6428.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2181	2181	2181	2181	2181	
5°	2187	2182	2192	2203	2220	209
15°	2177	2212	2278	2301	2324	616
25°	2134	2158	2207	2257	2279	984
35°	1982	1960	1982	1997	2002	1239
45°	1686	1639	1585	1350	1187	1301
55°	1308	1241	1084	900	861	1171
65°	911	822	675	604	612	898
75°	495	420	339	286	275	524
85°	143	101	93	93	96	155
90°	0	0	0	0	0	



TEST NUMBER: P35329

CATALOG NUMBER: 24ENA-LD2-70HP-UNV-L835-CD1-SVPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2181	2181	2181	2181	2181
2.5°	2189	2180	2180	2179	2186
5°	2187	2182	2192	2203	2220
7.5°	2184	2188	2224	2276	2300
10°	2182	2198	2267	2302	2306
12.5°	2179	2209	2281	2292	2304
15°	2177	2212	2278	2301	2324
17.5°	2172	2211	2272	2307	2333
20°	2163	2202	2258	2302	2328
22.5°	2151	2185	2237	2286	2312
25°	2134	2158	2207	2257	2279
27.5°	2109	2122	2165	2212	2229
30°	2077	2078	2114	2153	2166
32.5°	2036	2025	2053	2082	2095
35°	1982	1960	1982	1997	2002
37.5°	1923	1891	1903	1887	1824
40°	1853	1810	1814	1697	1518
42.5°	1769	1725	1711	1509	1311
45°	1686	1639	1585	1350	1187
47.5°	1602	1544	1457	1212	1087
50°	1507	1451	1333	1098	1003
52.5°	1411	1346	1209	993	932
55°	1308	1241	1084	900	861
57.5°	1210	1137	976	820	789
60°	1111	1029	872	745	734
62.5°	1005	929	770	674	680
65°	911	822	675	604	612
67.5°	806	717	587	533	530
70°	701	612	498	449	444
72.5°	598	516	423	365	354
75°	495	420	339	286	275
77.5°	395	333	260	210	198
80°	296	254	187	159	159
82.5°	214	173	131	125	129
85°	143	101	93	93	96
87.5°	63	52	55	53	57
90°	0	0	0	0	0

(END OF REPORT)