

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: P35049

Luminaire Tested: **24EN-LD2-49HP-UNV-L835-CD1-U**

Test Date: 08/25/16

Test Information

Test Method: LM-79-08
Report Number: P35049
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-LD2-49HP-UNV-L835-CD1-U
Description: ENCOUNTER 2X4 LED TROFFER
Light Source: (308) EATON 3500K LEDS
EL236N077E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 820 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4967.8 lumens
Efficiency: N/A
Efficacy: 134.3 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

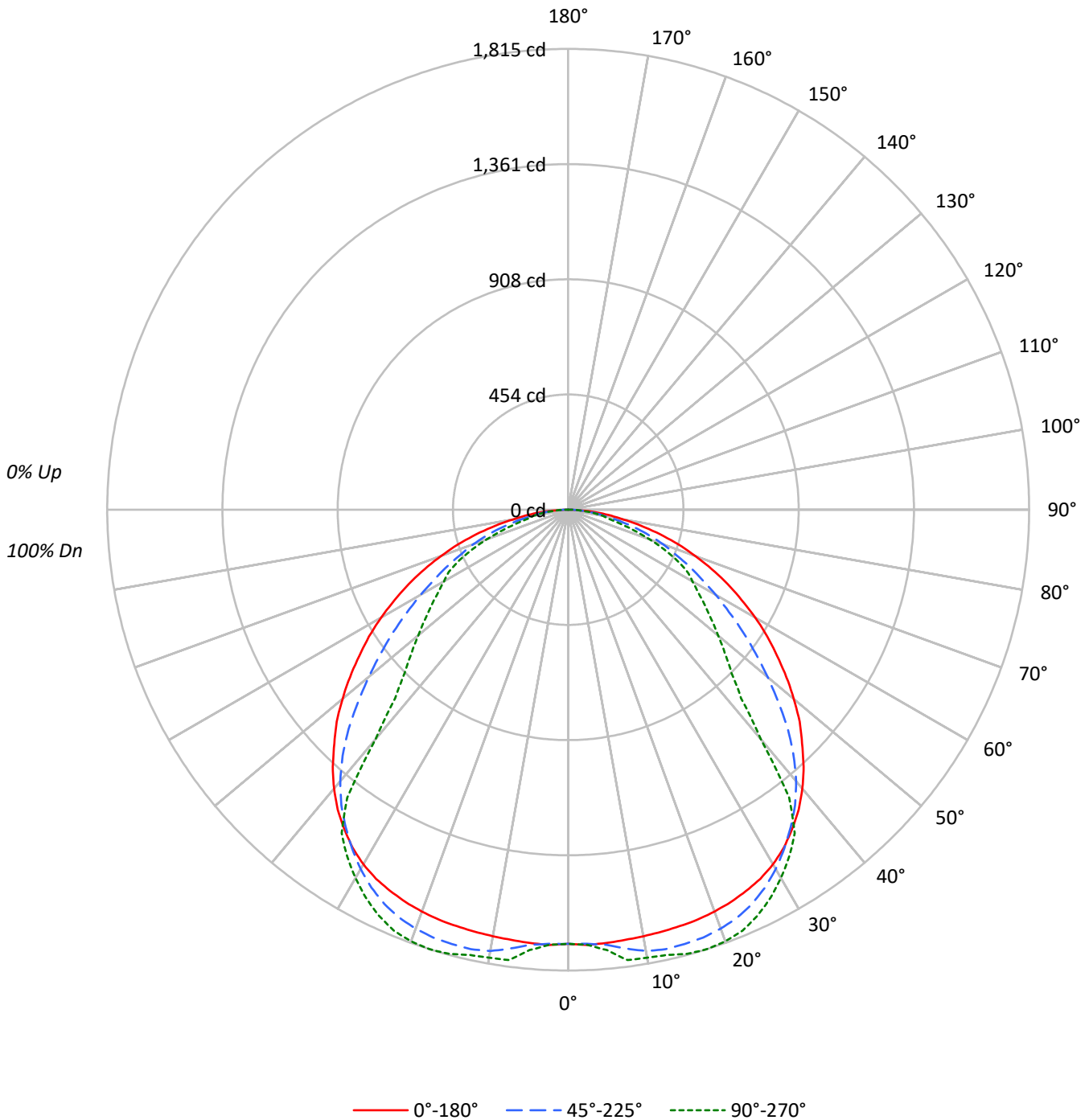
Input Watts (W): 37
Input Voltage (V): 120.0
Input Current (Ain): 0.310
Voltage Rise (V): NR
Power Factor: 0.9994
Total Harmonic Distortion (THDi): 7.74%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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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	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	84	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°	2619	2619	2619
5°	2634	2644	2677
10°	2653	2745	2787
15°	2692	2808	2872
20°	2745	2862	2949
25°	2800	2895	2981
30°	2853	2890	2962
35°	2874	2855	2907
40°	2867	2791	2359
45°	2820	2649	1971
50°	2764	2440	1837
55°	2681	2243	1754
60°	2604	2055	1731
65°	2512	1895	1714
70°	2378	1778	1527
75°	2213	1598	1237
80°	1940	1288	1208
85°	1828	1248	1160



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.7	3.3
10°-20°	498.2	10.0
20°-30°	787.8	15.9
30°-40°	951.6	19.2
40°-50°	896.1	18.0
50°-60°	742.5	14.9
60°-70°	543.4	10.9
70°-80°	297.1	6.0
80°-90°	85.5	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°	1451.7	29.2
0°-40°	2403.3	48.4
0°-60°	4041.8	81.4
0°-90°	4967.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4967.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1710	1710	1710	1710	1710	
5°	1713	1711	1720	1729	1741	163
15°	1698	1724	1771	1792	1811	481
25°	1657	1677	1713	1747	1764	765
35°	1537	1516	1527	1548	1555	960
45°	1302	1260	1223	1041	910	1005
55°	1004	949	840	696	657	899
65°	693	626	523	466	473	684
75°	374	326	270	220	209	395
85°	104	81	71	65	66	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1710	1710	1710	1710	1710
2.5°	1716	1711	1711	1709	1715
5°	1713	1711	1720	1729	1741
7.5°	1709	1714	1743	1774	1789
10°	1706	1719	1765	1786	1792
12.5°	1702	1723	1773	1784	1796
15°	1698	1724	1771	1792	1811
17.5°	1693	1721	1767	1795	1815
20°	1684	1713	1756	1789	1809
22.5°	1673	1698	1739	1774	1794
25°	1657	1677	1713	1747	1764
27.5°	1639	1649	1678	1707	1724
30°	1613	1614	1634	1659	1675
32.5°	1579	1569	1583	1609	1620
35°	1537	1516	1527	1548	1555
37.5°	1490	1459	1467	1457	1429
40°	1434	1395	1396	1314	1180
42.5°	1372	1329	1314	1169	1008
45°	1302	1260	1223	1041	910
47.5°	1236	1185	1122	940	837
50°	1160	1108	1024	845	771
52.5°	1083	1028	930	765	711
55°	1004	949	840	696	657
57.5°	930	867	751	625	607
60°	850	789	671	571	565
62.5°	770	707	592	521	529
65°	693	626	523	466	473
67.5°	612	548	455	410	409
70°	531	470	397	350	341
72.5°	455	396	333	284	273
75°	374	326	270	220	209
77.5°	295	263	208	164	162
80°	220	206	146	137	137
82.5°	159	142	110	100	102
85°	104	81	71	65	66
87.5°	39	36	33	33	34
90°	0	0	0	0	0

(END OF REPORT)