

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: P35237

Luminaire Tested: **14EN-LD2-51HP-UNV-L835-CD1-U**

Test Date: 10/08/16

Test Information

Test Method: LM-79-08
Report Number: P35237
Test Lab: INNOVATION CENTER-P3
Test Date: 10/08/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-51HP-UNV-L835-CD1-U
Description: ENCOUNTER 1X4 LED TROFFER
Light Source: (392) EATON 3500K LEDS
EL232N098E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 960 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5152.7 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.45 / 1.4 / 1.42
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

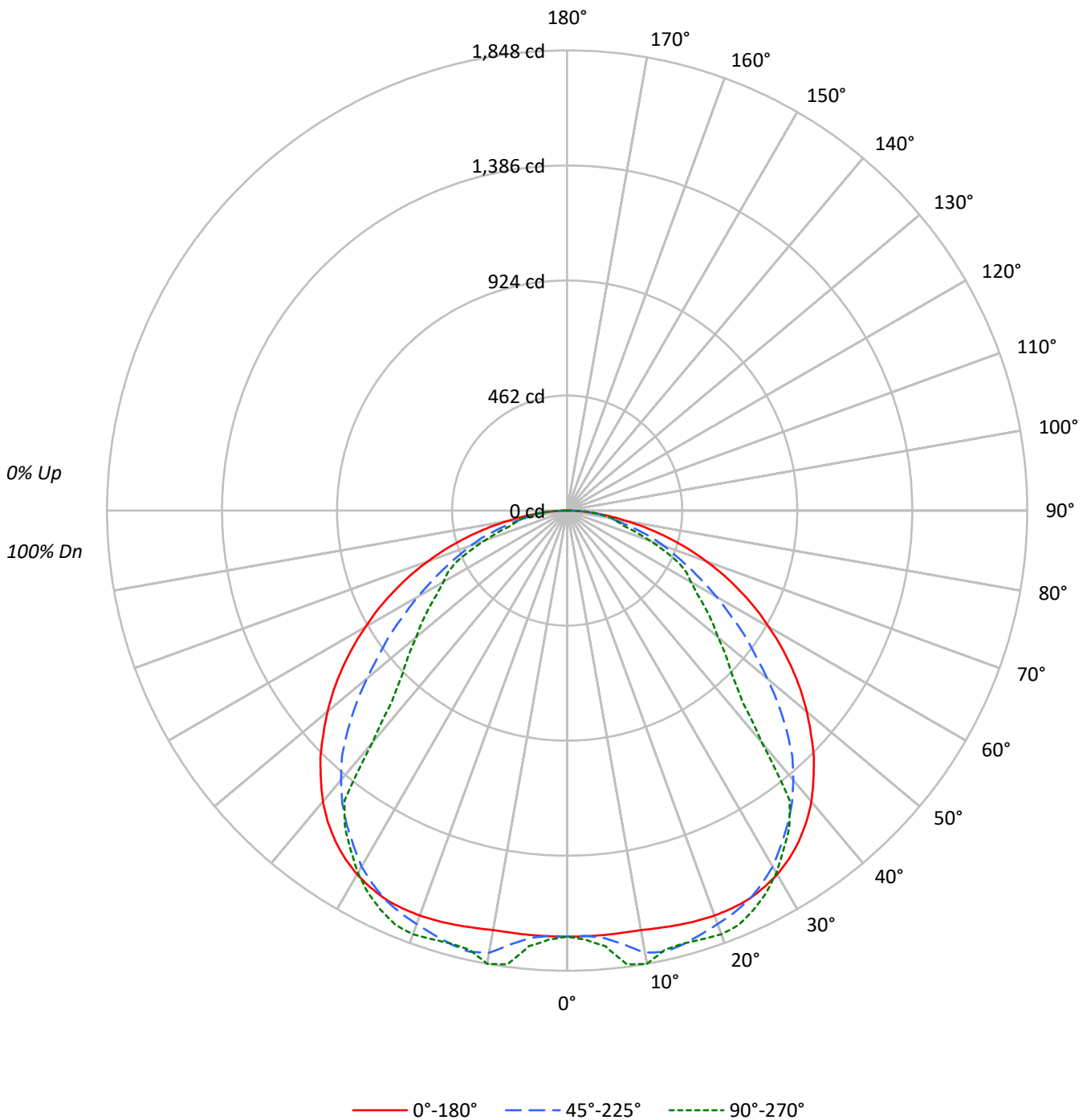
Input Watts (W): 43.3
Input Voltage (V): 120.0
Input Current (A_{in}): 0.362
Voltage Rise (V): NR
Power Factor: 0.9992
Total Harmonic Distortion (THDi): 8.01%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.5
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44					44			
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39					39			
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5765	5765	5765
5°	5787	5828	5940
10°	5854	6169	6323
15°	6011	6290	6279
20°	6207	6336	6494
25°	6406	6417	6581
30°	6564	6424	6537
35°	6672	6343	6396
40°	6712	6215	5358
45°	6676	5933	4475
50°	6584	5494	4147
55°	6468	5093	3960
60°	6308	4670	3868
65°	6123	4297	3939
70°	5842	4059	3478
75°	5442	3658	3059
80°	4735	3338	3629
85°	3982	4059	3982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	167.5	3.3
10°-20°	504.7	9.8
20°-30°	800.1	15.5
30°-40°	973.0	18.9
40°-50°	928.2	18.0
50°-60°	775.1	15.0
60°-70°	571.8	11.1
70°-80°	323.0	6.3
80°-90°	109.4	2.1
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°	1472.3	28.6
0°-40°	2445.2	47.5
0°-60°	4148.5	80.5
0°-90°	5152.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5152.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1711	1711	1711	1711	1711	
5°	1711	1715	1723	1743	1756	163
15°	1723	1764	1803	1795	1800	488
25°	1723	1723	1726	1760	1770	794
35°	1622	1572	1542	1560	1555	1013
45°	1401	1310	1245	1075	939	1078
55°	1101	996	867	715	674	984
65°	768	662	539	487	494	760
75°	418	343	281	245	235	442
85°	103	94	105	102	103	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1711	1711	1711	1711	1711
2.5°	1711	1712	1709	1719	1725
5°	1711	1715	1723	1743	1756
7.5°	1710	1724	1758	1812	1838
10°	1711	1740	1803	1848	1848
12.5°	1716	1757	1815	1812	1807
15°	1723	1764	1803	1795	1800
17.5°	1728	1763	1785	1792	1805
20°	1731	1755	1767	1792	1811
22.5°	1729	1742	1749	1785	1801
25°	1723	1723	1726	1760	1770
27.5°	1708	1698	1691	1722	1731
30°	1687	1663	1651	1674	1680
32.5°	1659	1622	1596	1619	1617
35°	1622	1572	1542	1560	1555
37.5°	1578	1512	1483	1481	1468
40°	1526	1450	1413	1345	1218
42.5°	1464	1380	1338	1198	1042
45°	1401	1310	1245	1075	939
47.5°	1328	1234	1150	968	865
50°	1256	1157	1048	871	791
52.5°	1181	1079	951	789	734
55°	1101	996	867	715	674
57.5°	1020	913	773	644	617
60°	936	829	693	583	574
62.5°	855	747	611	535	541
65°	768	662	539	487	494
67.5°	683	579	470	430	422
70°	593	498	412	364	353
72.5°	508	417	353	298	291
75°	418	343	281	245	235
77.5°	332	273	220	205	209
80°	244	219	172	181	187
82.5°	169	145	144	149	150
85°	103	94	105	102	103
87.5°	47	51	56	53	59
90°	0	0	0	0	0

(END OF REPORT)