

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: P182413

Luminaire Tested: **22FR-32-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182413
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26769)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FR-32-UNV-L850-CD1-U
Description: METALUX 2X2 FR TROFFER LED FIXTURE

Light Source: EATON LED 5000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3674.0 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

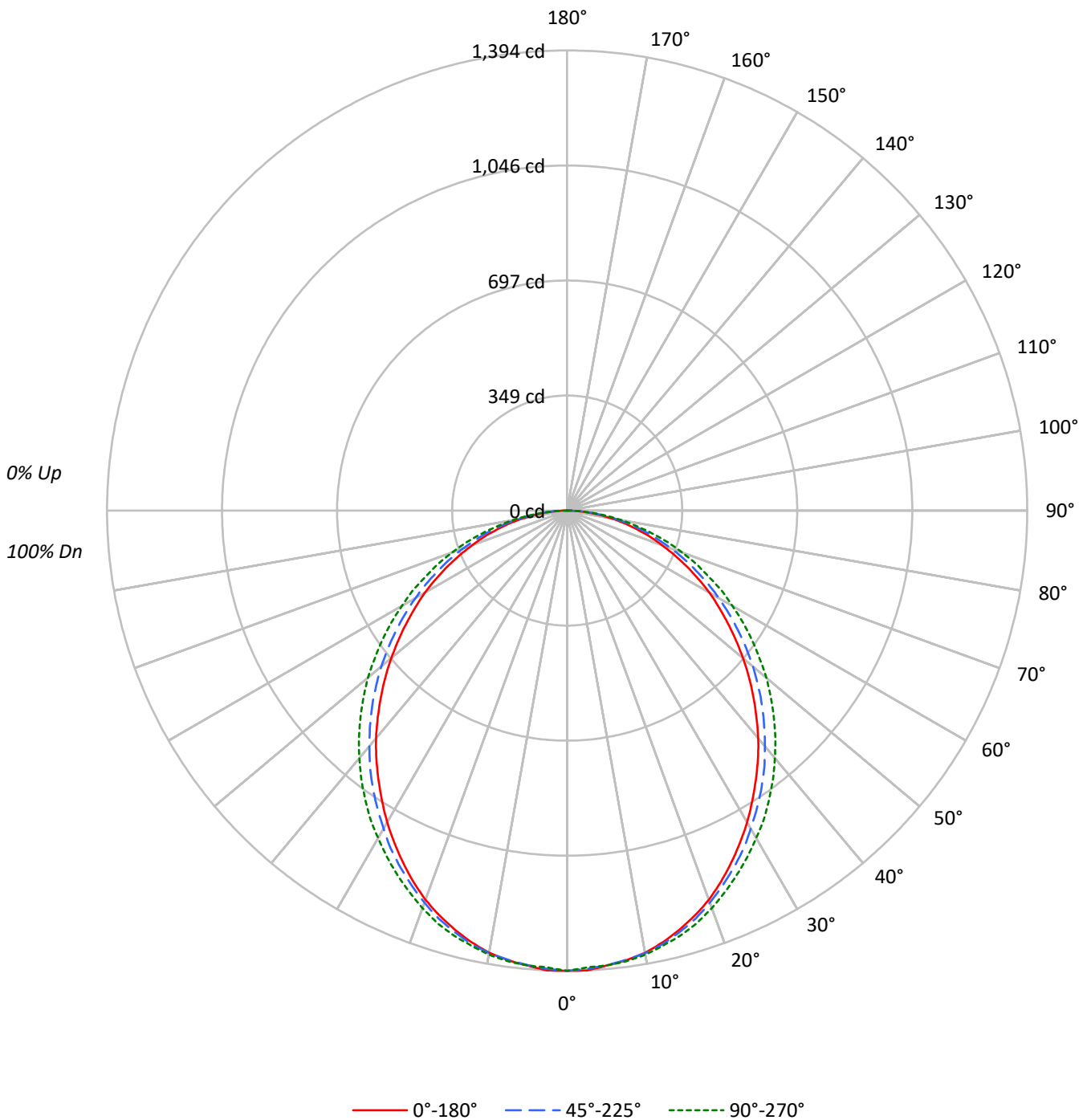
Input Watts (W): 34.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	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	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	28
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°	3752	3752	3752
5°	3737	3733	3737
10°	3716	3720	3733
15°	3662	3679	3710
20°	3594	3621	3670
25°	3493	3545	3614
30°	3388	3456	3558
35°	3273	3371	3505
40°	3164	3274	3439
45°	3035	3178	3368
50°	2912	3076	3299
55°	2785	2962	3204
60°	2681	2858	3111
65°	2544	2743	3012
70°	2404	2638	2909
75°	2264	2524	2769
80°	2087	2356	2574
85°	1837	2127	2226



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.4	3.6
10°-20°	372.5	10.1
20°-30°	550.6	15.0
30°-40°	643.4	17.5
40°-50°	646.3	17.6
50°-60°	568.1	15.5
60°-70°	429.7	11.7
70°-80°	256.3	7.0
80°-90°	75.8	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°	1054.5	28.7
0°-40°	1697.8	46.2
0°-60°	2912.2	79.3
0°-90°	3674.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3674.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1394	1394	1394	1394	1394	
5°	1383	1385	1382	1382	1383	131
15°	1314	1318	1321	1327	1332	370
25°	1176	1183	1194	1209	1217	542
35°	996	1007	1026	1051	1067	623
45°	797	805	835	866	885	616
55°	594	603	631	666	683	532
65°	400	404	431	461	473	396
75°	218	224	243	260	266	232
85°	60	61	69	74	72	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1394.3	1394.3	1394.3	1394.3	1394.3
2.5°	1394.3	1392.7	1389.6	1386.5	1384.9
5°	1383.3	1384.9	1381.8	1381.8	1383.3
7.5°	1373.9	1373.9	1372.4	1373.9	1377.1
10°	1359.8	1361.4	1361.4	1359.8	1366.1
12.5°	1339.5	1341.0	1344.2	1344.2	1348.9
15°	1314.4	1317.5	1320.7	1326.9	1331.6
17.5°	1286.2	1290.9	1295.6	1303.4	1309.7
20°	1254.9	1258.0	1264.3	1273.7	1281.5
22.5°	1217.3	1222.0	1229.8	1242.3	1250.2
25°	1176.5	1182.8	1193.8	1209.4	1217.3
27.5°	1134.2	1142.1	1156.2	1171.8	1182.8
30°	1090.4	1098.2	1112.3	1132.7	1145.2
32.5°	1043.4	1052.8	1070.0	1091.9	1109.2
35°	996.4	1007.3	1026.1	1051.2	1066.9
37.5°	949.4	958.8	980.7	1007.3	1024.6
40°	900.8	908.6	932.1	961.9	979.1
42.5°	849.1	858.5	883.6	914.9	933.7
45°	797.4	805.2	835.0	866.3	885.1
47.5°	747.3	756.7	784.9	817.8	836.6
50°	695.6	706.5	734.7	769.2	788.0
52.5°	643.9	653.3	683.0	717.5	734.7
55°	593.7	603.1	631.3	665.8	683.0
57.5°	545.2	553.0	581.2	614.1	631.3
60°	498.2	502.9	531.1	564.0	578.1
62.5°	448.1	454.3	481.0	512.3	529.5
65°	399.5	404.2	430.8	460.6	473.1
67.5°	350.9	357.2	383.8	410.5	423.0
70°	305.5	311.8	335.3	360.3	369.7
72.5°	263.2	267.9	286.7	310.2	319.6
75°	217.8	224.0	242.8	260.1	266.3
77.5°	177.0	181.7	197.4	211.5	214.6
80°	134.7	139.4	152.0	162.9	166.1
82.5°	95.6	100.3	109.7	117.5	119.1
85°	59.5	61.1	68.9	73.6	72.1
87.5°	25.1	26.6	28.2	28.2	25.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)