

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: P182408

Luminaire Tested: **22FR-24-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182408
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-24-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: 2601.0 lumens
Efficiency: N/A
Efficacy: 122.7 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

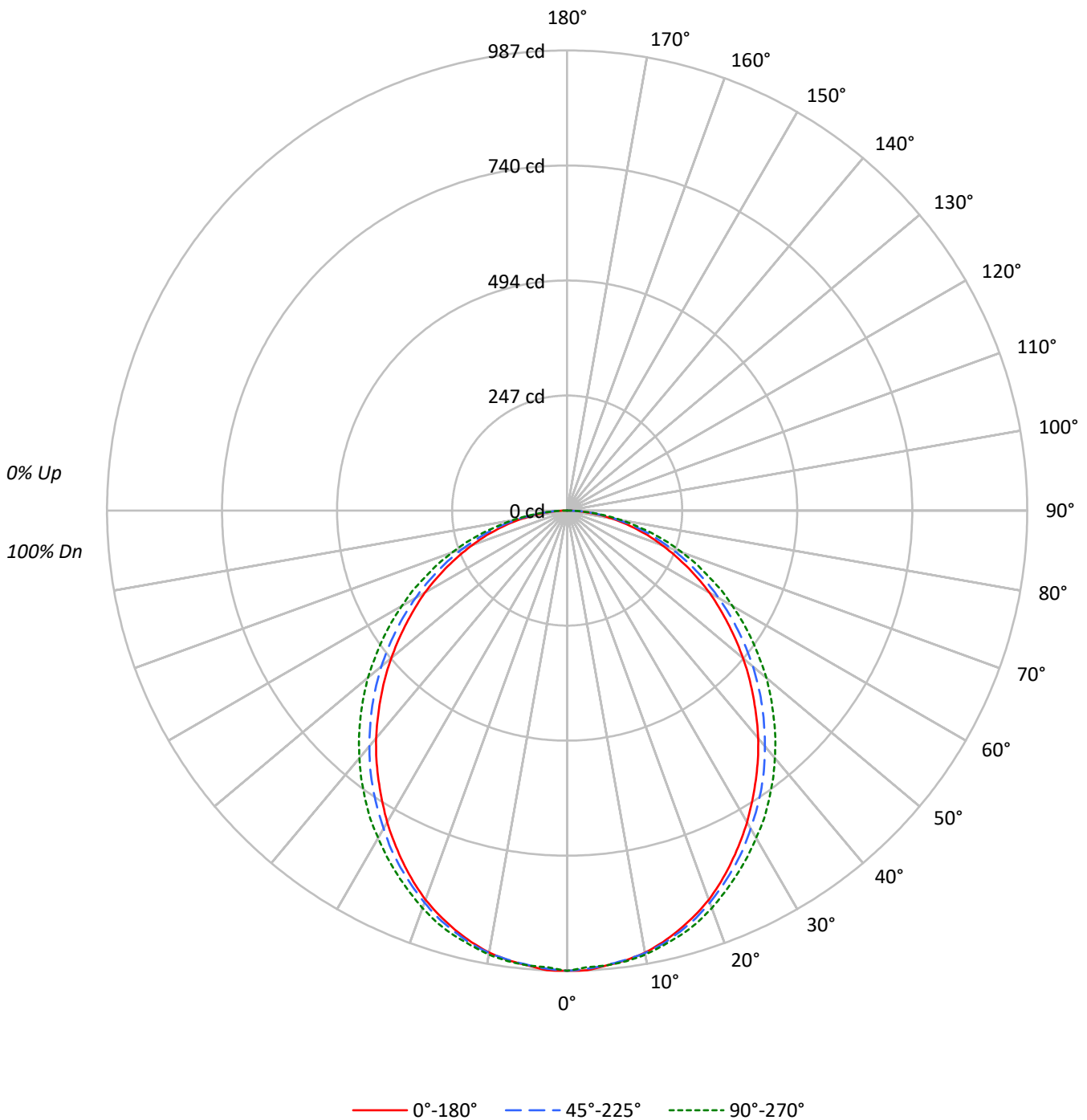
Input Watts (W): 21.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2656	2656	2656
5°	2645	2642	2645
10°	2631	2634	2643
15°	2592	2605	2626
20°	2544	2563	2598
25°	2473	2509	2559
30°	2399	2447	2519
35°	2317	2387	2481
40°	2240	2318	2435
45°	2148	2250	2385
50°	2061	2178	2336
55°	1972	2097	2269
60°	1898	2024	2203
65°	1801	1942	2132
70°	1702	1867	2059
75°	1603	1787	1960
80°	1478	1667	1822
85°	1300	1507	1575



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.0	3.6
10°-20°	263.7	10.1
20°-30°	389.8	15.0
30°-40°	455.5	17.5
40°-50°	457.5	17.6
50°-60°	402.2	15.5
60°-70°	304.2	11.7
70°-80°	181.4	7.0
80°-90°	53.7	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°	746.5	28.7
0°-40°	1202.0	46.2
0°-60°	2061.7	79.3
0°-90°	2601.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2601.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	979	980	978	978	979	93
15°	930	933	935	939	943	262
25°	833	837	845	856	862	384
35°	705	713	726	744	755	441
45°	564	570	591	613	627	436
55°	420	427	447	471	484	377
65°	283	286	305	326	335	280
75°	154	159	172	184	188	164
85°	42	43	49	52	51	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.1	987.1	987.1	987.1	987.1
2.5°	987.1	986.0	983.8	981.5	980.4
5°	979.3	980.4	978.2	978.2	979.3
7.5°	972.7	972.7	971.6	972.7	974.9
10°	962.7	963.8	963.8	962.7	967.1
12.5°	948.3	949.4	951.6	951.6	954.9
15°	930.5	932.7	935.0	939.4	942.7
17.5°	910.6	913.9	917.2	922.8	927.2
20°	888.4	890.6	895.0	901.7	907.2
22.5°	861.8	865.1	870.6	879.5	885.0
25°	832.9	837.4	845.1	856.2	861.8
27.5°	803.0	808.5	818.5	829.6	837.4
30°	771.9	777.5	787.4	801.9	810.7
32.5°	738.6	745.3	757.5	773.0	785.2
35°	705.4	713.1	726.5	744.2	755.3
37.5°	672.1	678.8	694.3	713.1	725.3
40°	637.7	643.3	659.9	681.0	693.2
42.5°	601.1	607.8	625.5	647.7	661.0
45°	564.5	570.1	591.1	613.3	626.6
47.5°	529.0	535.7	555.7	578.9	592.3
50°	492.4	500.2	520.2	544.6	557.9
52.5°	455.8	462.5	483.6	508.0	520.2
55°	420.3	427.0	447.0	471.4	483.6
57.5°	386.0	391.5	411.5	434.8	447.0
60°	352.7	356.0	376.0	399.3	409.3
62.5°	317.2	321.6	340.5	362.7	374.9
65°	282.8	286.1	305.0	326.1	334.9
67.5°	248.4	252.9	271.7	290.6	299.5
70°	216.3	220.7	237.3	255.1	261.7
72.5°	186.3	189.7	203.0	219.6	226.3
75°	154.2	158.6	171.9	184.1	188.5
77.5°	125.3	128.7	139.7	149.7	151.9
80°	95.4	98.7	107.6	115.3	117.6
82.5°	67.7	71.0	77.6	83.2	84.3
85°	42.1	43.3	48.8	52.1	51.0
87.5°	17.7	18.9	20.0	20.0	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)