

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: P182412

Luminaire Tested: **22FR-32-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182412
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-L840-CD1-U
Description: METALUX 2X2 FR TROFFER LED FIXTURE

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3409.0 lumens
Efficiency: N/A
Efficacy: 98.5 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

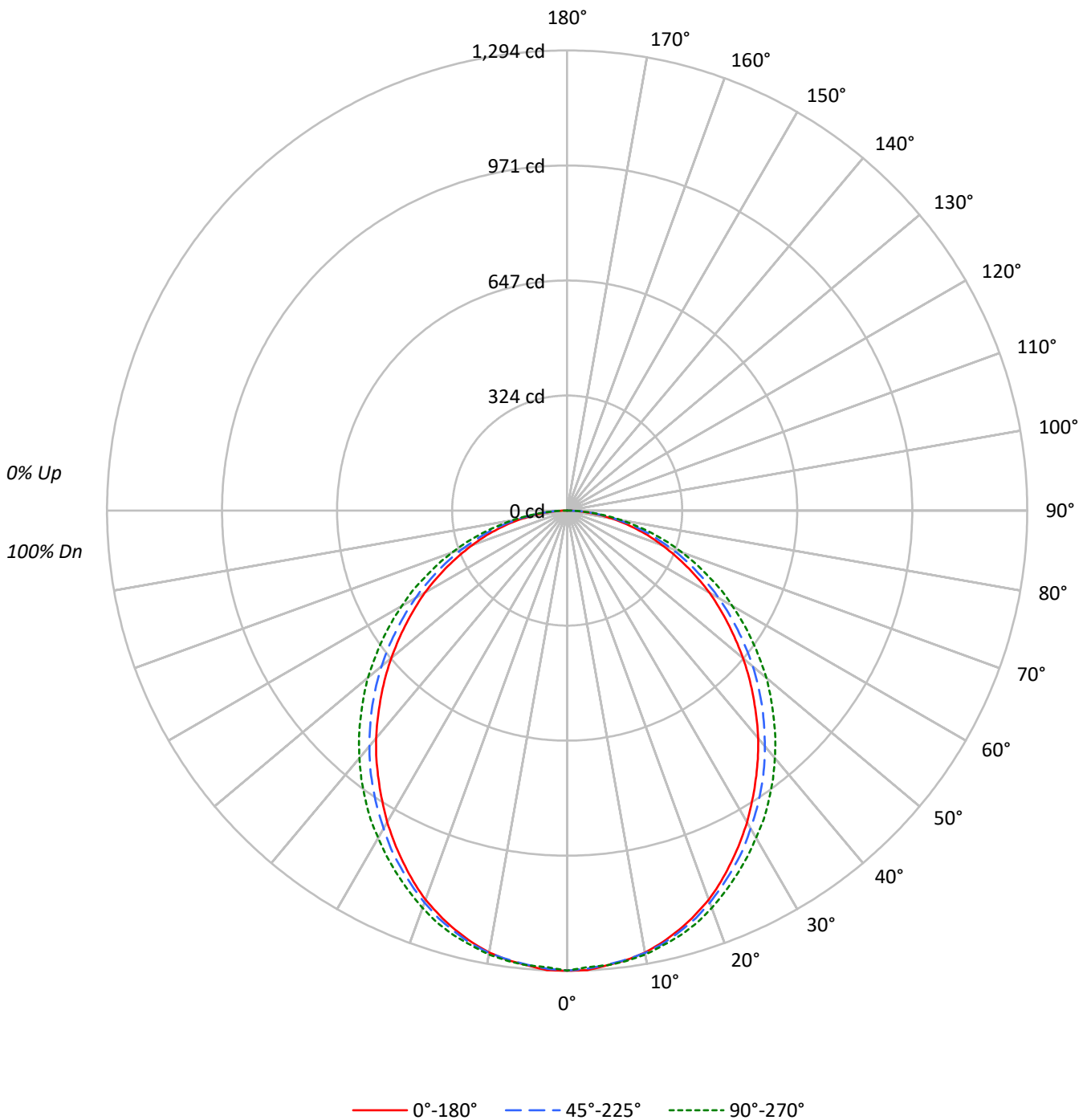
Input Watts (W): 34.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3481	3481	3481
5°	3467	3463	3467
10°	3448	3452	3464
15°	3398	3414	3442
20°	3334	3359	3405
25°	3241	3289	3354
30°	3144	3207	3302
35°	3037	3128	3252
40°	2936	3038	3191
45°	2816	2949	3126
50°	2702	2854	3061
55°	2585	2748	2974
60°	2488	2652	2887
65°	2360	2545	2795
70°	2231	2448	2699
75°	2101	2342	2569
80°	1937	2185	2388
85°	1704	1976	2066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.9	3.6
10°-20°	345.7	10.1
20°-30°	510.9	15.0
30°-40°	597.0	17.5
40°-50°	599.7	17.6
50°-60°	527.1	15.5
60°-70°	398.7	11.7
70°-80°	237.8	7.0
80°-90°	70.3	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°	978.4	28.7
0°-40°	1575.4	46.2
0°-60°	2702.2	79.3
0°-90°	3409.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3409.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1294	1294	1294	1294	1294	
5°	1284	1285	1282	1282	1284	122
15°	1220	1222	1225	1231	1236	344
25°	1092	1098	1108	1122	1130	503
35°	924	935	952	975	990	579
45°	740	747	775	804	821	571
55°	551	560	586	618	634	494
65°	371	375	400	427	439	367
75°	202	208	225	241	247	215
85°	55	57	64	68	67	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1293.7	1293.7	1293.7	1293.7	1293.7
2.5°	1293.7	1292.3	1289.4	1286.5	1285.0
5°	1283.5	1285.0	1282.1	1282.1	1283.5
7.5°	1274.8	1274.8	1273.4	1274.8	1277.7
10°	1261.7	1263.2	1263.2	1261.7	1267.6
12.5°	1242.8	1244.3	1247.2	1247.2	1251.6
15°	1219.6	1222.5	1225.4	1231.2	1235.6
17.5°	1193.4	1197.8	1202.1	1209.4	1215.2
20°	1164.4	1167.3	1173.1	1181.8	1189.1
22.5°	1129.5	1133.8	1141.1	1152.7	1160.0
25°	1091.7	1097.5	1107.7	1122.2	1129.5
27.5°	1052.4	1059.7	1072.8	1087.3	1097.5
30°	1011.7	1019.0	1032.1	1051.0	1062.6
32.5°	968.1	976.8	992.8	1013.2	1029.2
35°	924.5	934.7	952.1	975.4	989.9
37.5°	880.9	889.6	910.0	934.7	950.7
40°	835.8	843.1	864.9	892.5	908.5
42.5°	787.9	796.6	819.8	848.9	866.4
45°	739.9	747.2	774.8	803.9	821.3
47.5°	693.4	702.1	728.3	758.8	776.2
50°	645.4	655.6	681.7	713.7	731.2
52.5°	597.4	606.2	633.8	665.8	681.7
55°	550.9	559.6	585.8	617.8	633.8
57.5°	505.9	513.1	539.3	569.8	585.8
60°	462.3	466.6	492.8	523.3	536.4
62.5°	415.7	421.6	446.3	475.3	491.3
65°	370.7	375.0	399.7	427.4	439.0
67.5°	325.6	331.4	356.1	380.8	392.5
70°	283.5	289.3	311.1	334.3	343.1
72.5°	244.2	248.6	266.0	287.8	296.5
75°	202.1	207.9	225.3	241.3	247.1
77.5°	164.3	168.6	183.2	196.2	199.1
80°	125.0	129.4	141.0	151.2	154.1
82.5°	88.7	93.0	101.8	109.0	110.5
85°	55.2	56.7	64.0	68.3	66.9
87.5°	23.3	24.7	26.2	26.2	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)