

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: P184197

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27146)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22FR-32-HP-UNV-L850-CD1-U
Description: METALUX 2X2 FR TROFFER LED HIGH EFFICIENCY FIXTURE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3590.8 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.3
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

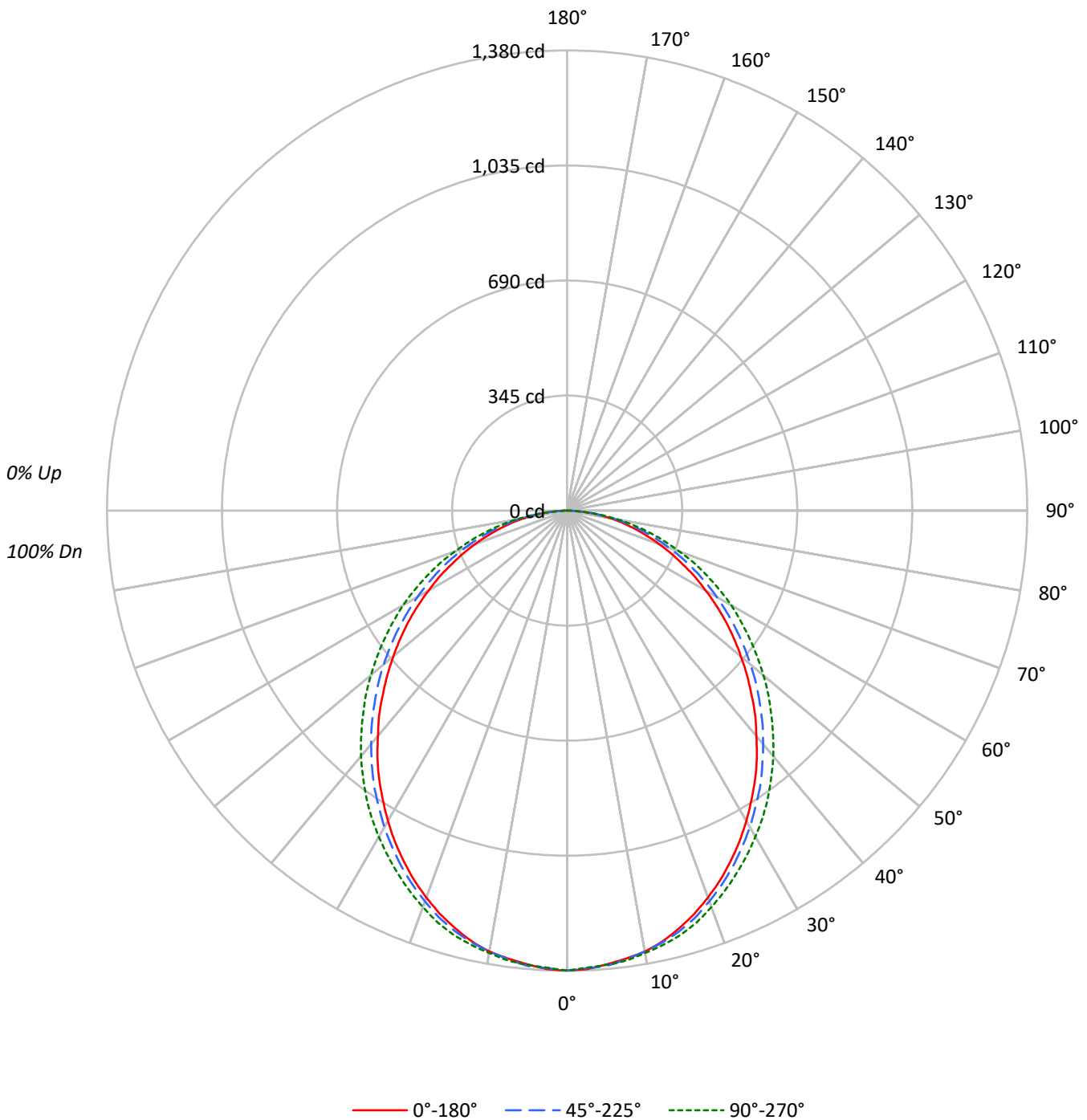
Input Watts (W): 28.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	78	85	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3712	3712	3712
5°	3689	3702	3693
10°	3669	3669	3682
15°	3614	3635	3669
20°	3536	3571	3623
25°	3444	3494	3567
30°	3339	3406	3510
35°	3230	3315	3450
40°	3100	3213	3379
45°	2976	3109	3295
50°	2846	3006	3216
55°	2725	2897	3133
60°	2584	2789	3060
65°	2446	2679	2951
70°	2315	2555	2818
75°	2171	2425	2663
80°	2008	2244	2410
85°	1695	1834	1834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.8	3.6
10°-20°	367.6	10.2
20°-30°	542.4	15.1
30°-40°	632.1	17.6
40°-50°	632.8	17.6
50°-60°	554.1	15.4
60°-70°	417.7	11.6
70°-80°	246.2	6.9
80°-90°	68.1	1.9
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°	1039.8	29.0
0°-40°	1672.0	46.6
0°-60°	2858.9	79.6
0°-90°	3590.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3590.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1366	1367	1370	1364	1367	130
15°	1297	1299	1305	1309	1317	365
25°	1160	1165	1177	1190	1201	534
35°	983	989	1009	1030	1050	614
45°	782	793	817	846	866	604
55°	581	590	617	646	668	519
65°	384	395	421	445	463	382
75°	209	216	233	248	256	222
85°	55	58	59	59	59	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1379.5	1379.5	1379.5	1379.5	1379.5
2.5°	1376.5	1376.5	1373.4	1371.9	1371.9
5°	1365.8	1367.3	1370.4	1364.3	1367.3
7.5°	1355.1	1355.1	1356.7	1358.2	1361.2
10°	1342.9	1342.9	1342.9	1347.5	1347.5
12.5°	1323.1	1323.1	1326.2	1327.7	1333.8
15°	1297.2	1298.7	1304.8	1309.4	1317.0
17.5°	1268.3	1271.3	1278.9	1285.0	1294.2
20°	1234.7	1240.8	1246.9	1256.1	1265.2
22.5°	1199.7	1204.2	1213.4	1224.0	1234.7
25°	1160.0	1164.6	1176.8	1190.5	1201.2
27.5°	1118.9	1123.4	1137.2	1152.4	1166.1
30°	1074.7	1080.8	1096.0	1114.3	1129.5
32.5°	1028.9	1035.0	1051.8	1073.1	1091.4
35°	983.2	989.3	1009.1	1030.5	1050.3
37.5°	934.4	940.5	961.9	986.2	1006.1
40°	882.6	891.7	914.6	942.0	961.9
42.5°	835.3	843.0	867.3	894.8	914.6
45°	782.0	792.7	817.0	846.0	865.8
47.5°	731.7	742.4	768.3	797.2	818.6
50°	679.9	690.5	718.0	746.9	768.3
52.5°	631.1	640.2	667.7	696.6	718.0
55°	580.8	589.9	617.4	646.3	667.7
57.5°	530.5	539.6	567.1	596.0	617.4
60°	480.2	490.8	518.3	545.7	568.6
62.5°	432.9	442.1	469.5	495.4	515.2
65°	384.1	394.8	420.7	445.1	463.4
67.5°	338.4	349.1	373.5	397.9	413.1
70°	294.2	303.3	324.7	347.5	358.2
72.5°	250.0	259.1	279.0	297.2	306.4
75°	208.8	216.5	233.2	248.5	256.1
77.5°	169.2	176.8	189.0	199.7	205.8
80°	129.6	134.1	144.8	150.9	155.5
82.5°	91.5	96.0	100.6	106.7	106.7
85°	54.9	57.9	59.4	59.4	59.4
87.5°	22.9	22.9	19.8	16.8	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)