

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: P184195

Luminaire Tested: **22FR-32-HP-UNV-L835-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184195
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-L835-CD1-U
Description: METALUX 2X2 FR TROFFER LED HIGH EFFICIENCY FIXTURE

Light Source: EATON LED 3500K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3238.0 lumens
Efficiency: N/A
Efficacy: 112.8 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

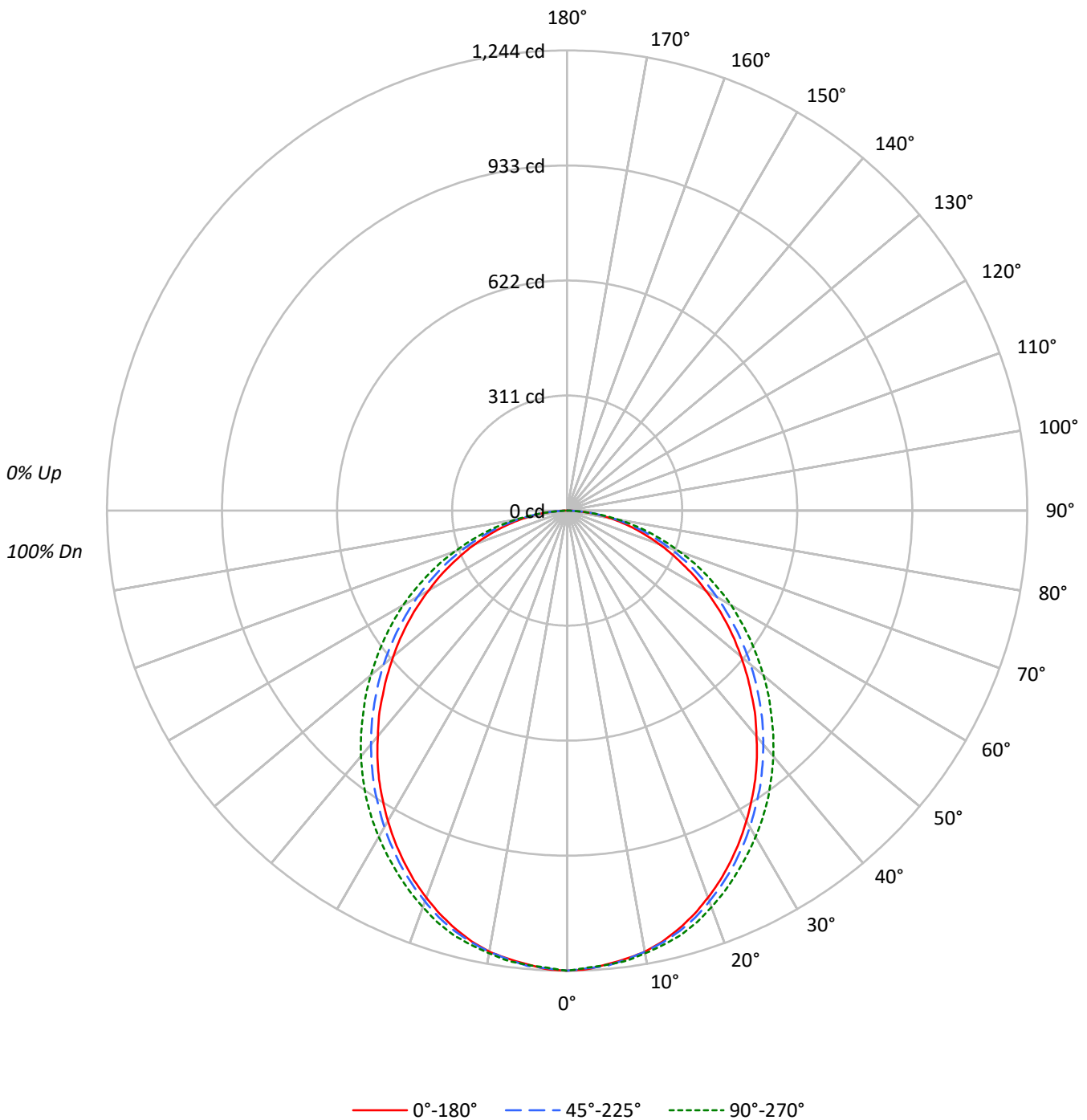
Input Watts (W): 28.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3348	3348	3348
5°	3327	3338	3331
10°	3309	3309	3320
15°	3259	3278	3309
20°	3188	3220	3267
25°	3106	3151	3216
30°	3011	3071	3165
35°	2913	2989	3111
40°	2796	2897	3047
45°	2683	2804	2971
50°	2566	2710	2900
55°	2457	2612	2825
60°	2330	2515	2759
65°	2206	2416	2661
70°	2087	2304	2541
75°	1958	2187	2401
80°	1810	2024	2173
85°	1528	1655	1655



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	3.6
10°-20°	331.5	10.2
20°-30°	489.1	15.1
30°-40°	570.0	17.6
40°-50°	570.7	17.6
50°-60°	499.7	15.4
60°-70°	376.6	11.6
70°-80°	222.0	6.9
80°-90°	61.4	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°	937.6	29.0
0°-40°	1507.7	46.6
0°-60°	2578.0	79.6
0°-90°	3238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3238.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1244	1244	1244	1244	1244	
5°	1232	1233	1236	1230	1233	117
15°	1170	1171	1177	1181	1188	329
25°	1046	1050	1061	1074	1083	481
35°	887	892	910	929	947	554
45°	705	715	737	763	781	545
55°	524	532	557	583	602	468
65°	346	356	379	401	418	344
75°	188	195	210	224	231	200
85°	50	52	54	54	54	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1244.0	1244.0	1244.0	1244.0	1244.0
2.5°	1241.2	1241.2	1238.5	1237.1	1237.1
5°	1231.6	1233.0	1235.7	1230.2	1233.0
7.5°	1222.0	1222.0	1223.3	1224.7	1227.5
10°	1211.0	1211.0	1211.0	1215.1	1215.1
12.5°	1193.1	1193.1	1195.9	1197.2	1202.7
15°	1169.7	1171.1	1176.6	1180.7	1187.6
17.5°	1143.6	1146.4	1153.2	1158.7	1167.0
20°	1113.4	1118.9	1124.4	1132.6	1140.9
22.5°	1081.8	1085.9	1094.1	1103.8	1113.4
25°	1046.0	1050.2	1061.2	1073.5	1083.1
27.5°	1008.9	1013.0	1025.4	1039.2	1051.5
30°	969.1	974.6	988.3	1004.8	1018.5
32.5°	927.8	933.3	948.4	967.7	984.2
35°	886.6	892.1	910.0	929.2	947.1
37.5°	842.6	848.1	867.3	889.3	907.2
40°	795.9	804.1	824.7	849.5	867.3
42.5°	753.3	760.1	782.1	806.9	824.7
45°	705.1	714.8	736.8	762.9	780.7
47.5°	659.8	669.4	692.8	718.9	738.1
50°	613.0	622.7	647.4	673.5	692.8
52.5°	569.1	577.3	602.1	628.2	647.4
55°	523.7	532.0	556.7	582.8	602.1
57.5°	478.3	486.6	511.3	537.4	556.7
60°	433.0	442.6	467.3	492.1	512.7
62.5°	390.4	398.6	423.4	446.7	464.6
65°	346.4	356.0	379.4	401.4	417.9
67.5°	305.2	314.8	336.8	358.8	372.5
70°	265.3	273.5	292.8	313.4	323.0
72.5°	225.4	233.7	251.5	268.0	276.3
75°	188.3	195.2	210.3	224.1	230.9
77.5°	152.6	159.4	170.4	180.1	185.6
80°	116.8	121.0	130.6	136.1	140.2
82.5°	82.5	86.6	90.7	96.2	96.2
85°	49.5	52.2	53.6	53.6	53.6
87.5°	20.6	20.6	17.9	15.1	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)