

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: P184194

Luminaire Tested: **22FR-32-HP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184194
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-L830-CD1-U
Description: METALUX 2X2 FR TROFFER LED HIGH EFFICIENCY FIXTURE

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3144.6 lumens
Efficiency: N/A
Efficacy: 109.6 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

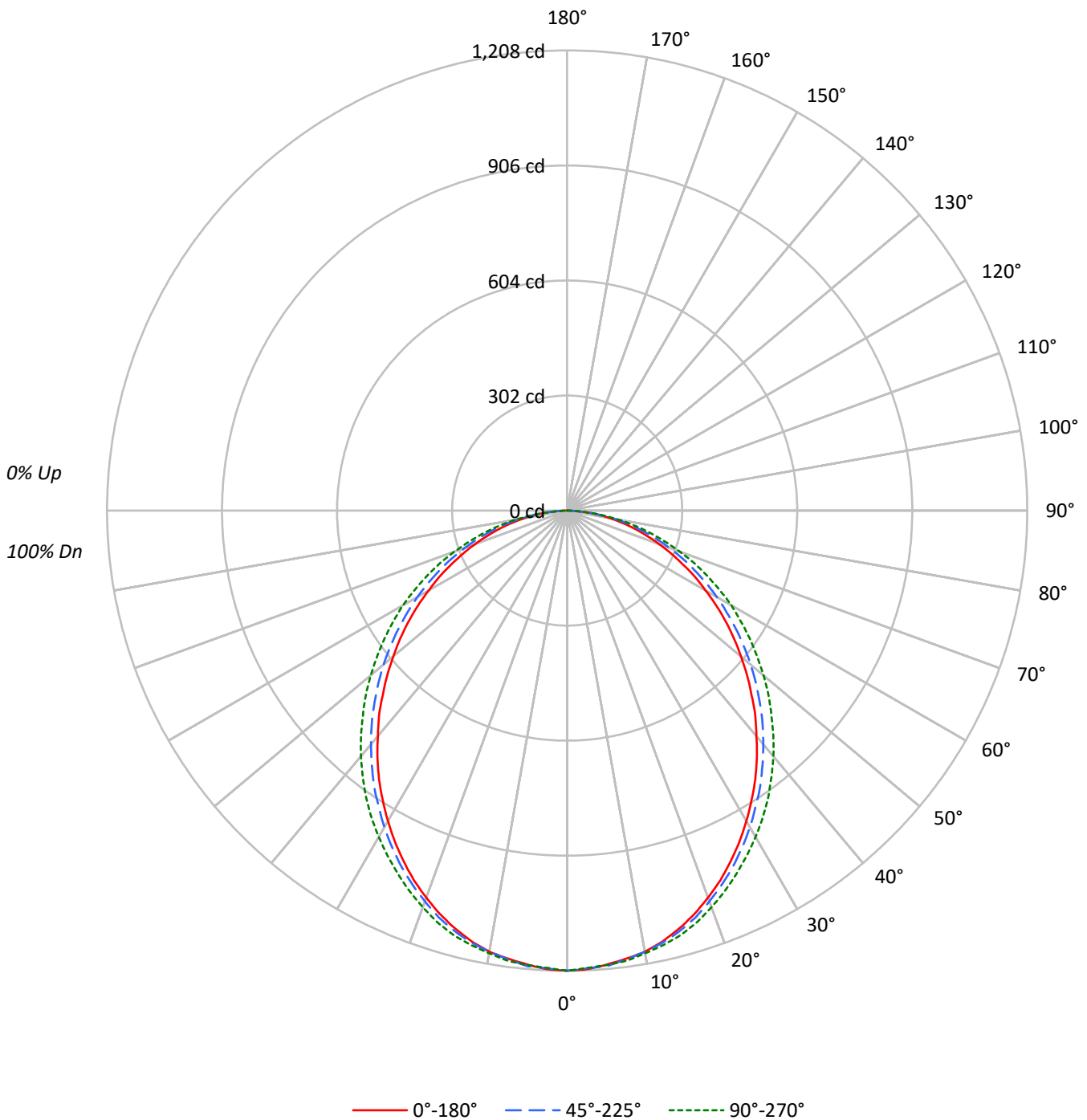
Input Watts (W): 28.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3251	3251	3251
5°	3231	3242	3234
10°	3213	3213	3225
15°	3165	3183	3213
20°	3096	3127	3173
25°	3016	3060	3123
30°	2924	2982	3074
35°	2828	2903	3021
40°	2715	2813	2959
45°	2606	2723	2885
50°	2493	2632	2817
55°	2386	2536	2743
60°	2263	2443	2680
65°	2142	2346	2584
70°	2027	2237	2468
75°	1902	2123	2332
80°	1759	1965	2111
85°	1485	1609	1609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.7	3.6
10°-20°	321.9	10.2
20°-30°	475.0	15.1
30°-40°	553.6	17.6
40°-50°	554.2	17.6
50°-60°	485.2	15.4
60°-70°	365.7	11.6
70°-80°	215.6	6.9
80°-90°	59.6	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°	910.6	29.0
0°-40°	1464.2	46.6
0°-60°	2503.6	79.6
0°-90°	3144.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3144.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1196	1197	1200	1195	1197	114
15°	1136	1137	1143	1147	1153	320
25°	1016	1020	1030	1043	1052	468
35°	861	866	884	902	920	538
45°	685	694	716	741	758	529
55°	509	517	541	566	585	455
65°	336	346	368	390	406	334
75°	183	190	204	218	224	194
85°	48	51	52	52	52	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.1	1208.1	1208.1	1208.1	1208.1
2.5°	1205.4	1205.4	1202.7	1201.4	1201.4
5°	1196.1	1197.4	1200.1	1194.7	1197.4
7.5°	1186.7	1186.7	1188.1	1189.4	1192.1
10°	1176.0	1176.0	1176.0	1180.1	1180.1
12.5°	1158.7	1158.7	1161.4	1162.7	1168.0
15°	1136.0	1137.3	1142.7	1146.7	1153.4
17.5°	1110.6	1113.3	1120.0	1125.3	1133.3
20°	1081.3	1086.6	1091.9	1100.0	1108.0
22.5°	1050.6	1054.6	1062.6	1071.9	1081.3
25°	1015.9	1019.9	1030.5	1042.6	1051.9
27.5°	979.8	983.8	995.8	1009.2	1021.2
30°	941.1	946.4	959.8	975.8	989.2
32.5°	901.1	906.4	921.1	939.8	955.8
35°	861.0	866.3	883.7	902.4	919.7
37.5°	818.3	823.6	842.3	863.7	881.0
40°	772.9	780.9	800.9	825.0	842.3
42.5°	731.5	738.2	759.6	783.6	800.9
45°	684.8	694.1	715.5	740.9	758.2
47.5°	640.8	650.1	672.8	698.2	716.8
50°	595.4	604.7	628.7	654.1	672.8
52.5°	552.6	560.7	584.7	610.0	628.7
55°	508.6	516.6	540.6	566.0	584.7
57.5°	464.5	472.6	496.6	521.9	540.6
60°	420.5	429.8	453.9	477.9	497.9
62.5°	379.1	387.1	411.1	433.8	451.2
65°	336.4	345.7	368.4	389.8	405.8
67.5°	296.3	305.7	327.1	348.4	361.8
70°	257.6	265.6	284.3	304.4	313.7
72.5°	218.9	226.9	244.3	260.3	268.3
75°	182.9	189.6	204.2	217.6	224.3
77.5°	148.2	154.8	165.5	174.9	180.2
80°	113.5	117.5	126.8	132.2	136.2
82.5°	80.1	84.1	88.1	93.4	93.4
85°	48.1	50.7	52.1	52.1	52.1
87.5°	20.0	20.0	17.4	14.7	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)