

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: P182409

Luminaire Tested: **22FR-32-UNV-L827-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182409
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-L827-CD1-U
Description: METALUX 2X2 FR TROFFER LED FIXTURE

Light Source: EATON LED 2700K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3090.0 lumens
Efficiency: N/A
Efficacy: 89.3 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

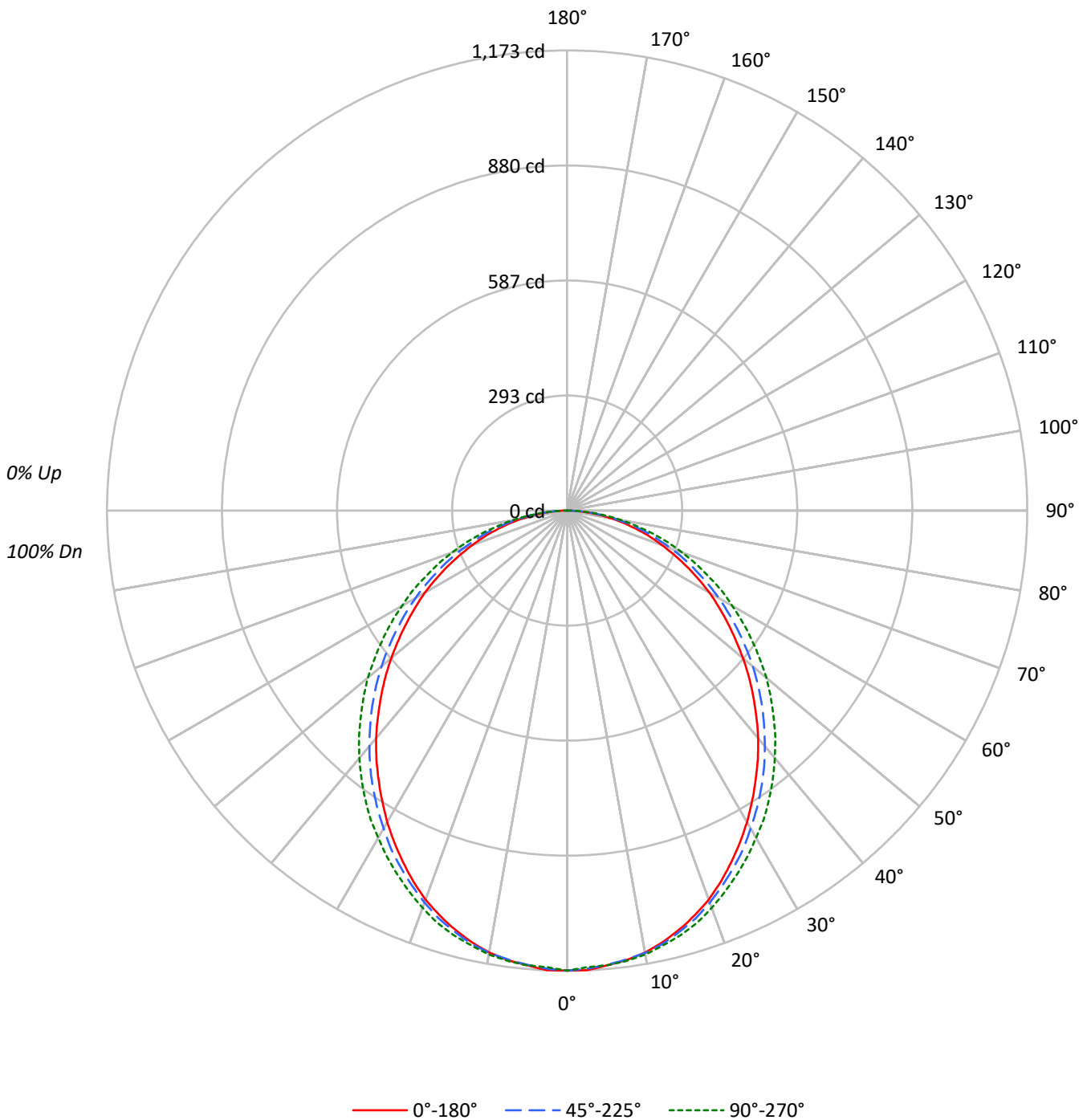
Input Watts (W): 34.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3156	3156	3156
5°	3143	3139	3143
10°	3125	3129	3139
15°	3080	3094	3120
20°	3022	3045	3086
25°	2938	2981	3040
30°	2849	2907	2993
35°	2753	2835	2948
40°	2661	2754	2893
45°	2552	2673	2833
50°	2449	2587	2775
55°	2343	2491	2695
60°	2255	2404	2617
65°	2139	2307	2534
70°	2021	2219	2447
75°	1904	2123	2329
80°	1756	1980	2165
85°	1547	1791	1871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	3.6
10°-20°	313.3	10.1
20°-30°	463.0	15.0
30°-40°	541.1	17.5
40°-50°	543.5	17.6
50°-60°	477.8	15.5
60°-70°	361.4	11.7
70°-80°	215.5	7.0
80°-90°	63.8	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°	886.8	28.7
0°-40°	1428.0	46.2
0°-60°	2449.3	79.3
0°-90°	3090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3090.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1173	1173	1173	1173	1173	
5°	1163	1165	1162	1162	1163	110
15°	1106	1108	1111	1116	1120	311
25°	990	995	1004	1017	1024	456
35°	838	847	863	884	897	524
45°	671	677	702	729	744	518
55°	499	507	531	560	574	447
65°	336	340	362	387	398	333
75°	183	188	204	219	224	195
85°	50	51	58	62	61	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1172.7	1172.7	1172.7	1172.7	1172.7
2.5°	1172.7	1171.3	1168.7	1166.1	1164.8
5°	1163.4	1164.8	1162.1	1162.1	1163.4
7.5°	1155.5	1155.5	1154.2	1155.5	1158.2
10°	1143.7	1145.0	1145.0	1143.7	1148.9
12.5°	1126.5	1127.9	1130.5	1130.5	1134.5
15°	1105.5	1108.1	1110.7	1116.0	1120.0
17.5°	1081.7	1085.7	1089.7	1096.2	1101.5
20°	1055.4	1058.0	1063.3	1071.2	1077.8
22.5°	1023.8	1027.7	1034.3	1044.9	1051.4
25°	989.5	994.8	1004.0	1017.2	1023.8
27.5°	953.9	960.5	972.4	985.6	994.8
30°	917.0	923.6	935.5	952.6	963.2
32.5°	877.5	885.4	899.9	918.4	932.9
35°	838.0	847.2	863.0	884.1	897.3
37.5°	798.5	806.4	824.8	847.2	861.7
40°	757.6	764.2	784.0	809.0	823.5
42.5°	714.1	722.0	743.1	769.5	785.3
45°	670.7	677.2	702.3	728.6	744.4
47.5°	628.5	636.4	660.1	687.8	703.6
50°	585.0	594.2	618.0	646.9	662.8
52.5°	541.5	549.4	574.5	603.5	618.0
55°	499.4	507.3	531.0	560.0	574.5
57.5°	458.5	465.1	488.8	516.5	531.0
60°	419.0	422.9	446.7	474.3	486.2
62.5°	376.8	382.1	404.5	430.9	445.3
65°	336.0	339.9	362.3	387.4	397.9
67.5°	295.1	300.4	322.8	345.2	355.8
70°	256.9	262.2	282.0	303.0	311.0
72.5°	221.4	225.3	241.1	260.9	268.8
75°	183.1	188.4	204.2	218.7	224.0
77.5°	148.9	152.8	166.0	177.9	180.5
80°	113.3	117.3	127.8	137.0	139.7
82.5°	80.4	84.3	92.2	98.8	100.1
85°	50.1	51.4	58.0	61.9	60.6
87.5°	21.1	22.4	23.7	23.7	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)