

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: P184193

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P184193
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-L827-CD1-U
Description: METALUX 2X2 FR TROFFER LED HIGH EFFICIENCY FIXTURE

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

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3076.1 lumens
Efficiency: N/A
Efficacy: 107.2 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

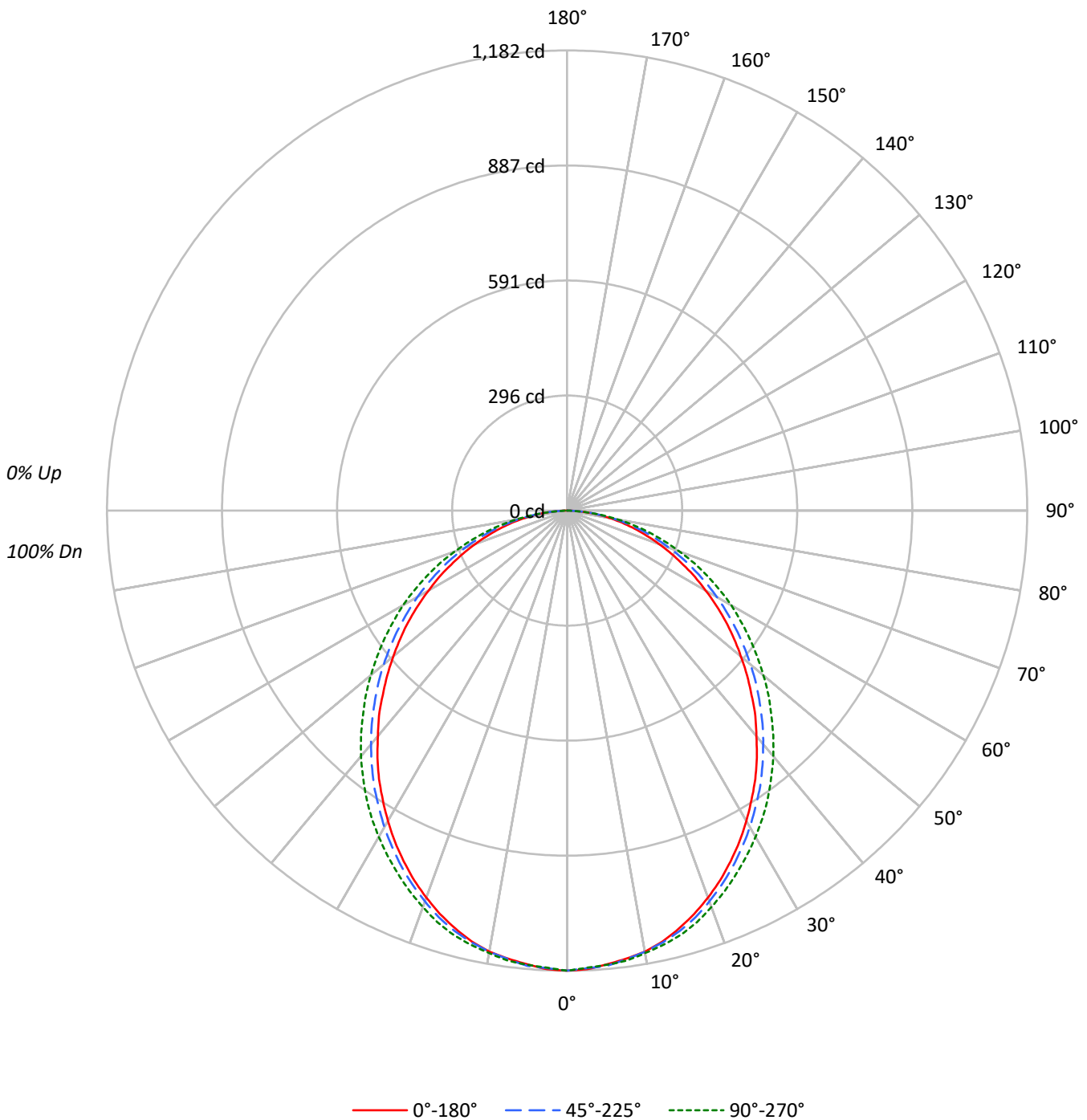
Input Watts (W): 28.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3180	3180	3180
5°	3160	3171	3164
10°	3143	3143	3154
15°	3096	3114	3143
20°	3029	3059	3104
25°	2950	2993	3055
30°	2861	2917	3007
35°	2767	2840	2956
40°	2656	2752	2895
45°	2549	2664	2823
50°	2438	2575	2755
55°	2334	2481	2684
60°	2214	2390	2622
65°	2096	2295	2528
70°	1983	2188	2415
75°	1860	2077	2281
80°	1720	1923	2064
85°	1451	1572	1572



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.2	3.6
10°-20°	314.9	10.2
20°-30°	464.7	15.1
30°-40°	541.5	17.6
40°-50°	542.1	17.6
50°-60°	474.7	15.4
60°-70°	357.8	11.6
70°-80°	210.9	6.9
80°-90°	58.3	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°	890.8	29.0
0°-40°	1432.3	46.6
0°-60°	2449.1	79.6
0°-90°	3076.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1170	1171	1174	1169	1171	111
15°	1111	1113	1118	1122	1128	313
25°	994	998	1008	1020	1029	457
35°	842	848	864	883	900	526
45°	670	679	700	725	742	517
55°	498	505	529	554	572	445
65°	329	338	360	381	397	327
75°	179	185	200	213	219	190
85°	47	50	51	51	51	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1181.8	1181.8	1181.8	1181.8	1181.8
2.5°	1179.2	1179.2	1176.5	1175.2	1175.2
5°	1170.0	1171.3	1173.9	1168.7	1171.3
7.5°	1160.9	1160.9	1162.2	1163.5	1166.1
10°	1150.4	1150.4	1150.4	1154.3	1154.3
12.5°	1133.5	1133.5	1136.1	1137.4	1142.6
15°	1111.3	1112.6	1117.8	1121.7	1128.2
17.5°	1086.4	1089.1	1095.6	1100.8	1108.6
20°	1057.7	1062.9	1068.2	1076.0	1083.8
22.5°	1027.7	1031.6	1039.4	1048.6	1057.7
25°	993.7	997.6	1008.1	1019.8	1029.0
27.5°	958.5	962.4	974.1	987.2	999.0
30°	920.6	925.8	938.9	954.6	967.6
32.5°	881.4	886.7	901.0	919.3	935.0
35°	842.3	847.5	864.5	882.7	899.7
37.5°	800.5	805.7	824.0	844.9	861.8
40°	756.1	763.9	783.5	807.0	824.0
42.5°	715.6	722.1	743.0	766.5	783.5
45°	669.9	679.0	699.9	724.7	741.7
47.5°	626.8	635.9	658.1	682.9	701.2
50°	582.4	591.5	615.0	639.9	658.1
52.5°	540.6	548.4	572.0	596.8	615.0
55°	497.5	505.4	528.9	553.7	572.0
57.5°	454.4	462.3	485.8	510.6	528.9
60°	411.3	420.5	444.0	467.5	487.1
62.5°	370.9	378.7	402.2	424.4	441.4
65°	329.1	338.2	360.4	381.3	397.0
67.5°	289.9	299.0	319.9	340.8	353.9
70°	252.0	259.9	278.1	297.7	306.9
72.5°	214.2	222.0	239.0	254.6	262.5
75°	178.9	185.4	199.8	212.8	219.4
77.5°	144.9	151.5	161.9	171.1	176.3
80°	111.0	114.9	124.1	129.3	133.2
82.5°	78.3	82.3	86.2	91.4	91.4
85°	47.0	49.6	50.9	50.9	50.9
87.5°	19.6	19.6	17.0	14.4	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)