

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: P272007

Luminaire Tested: **22CZ2-44-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P272007  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44-UNV-L940-CD1-U  
Description: 2'X2' TROFFER LED MODULE,RIBBED LENS, 90CRI  
Light Source: (98) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

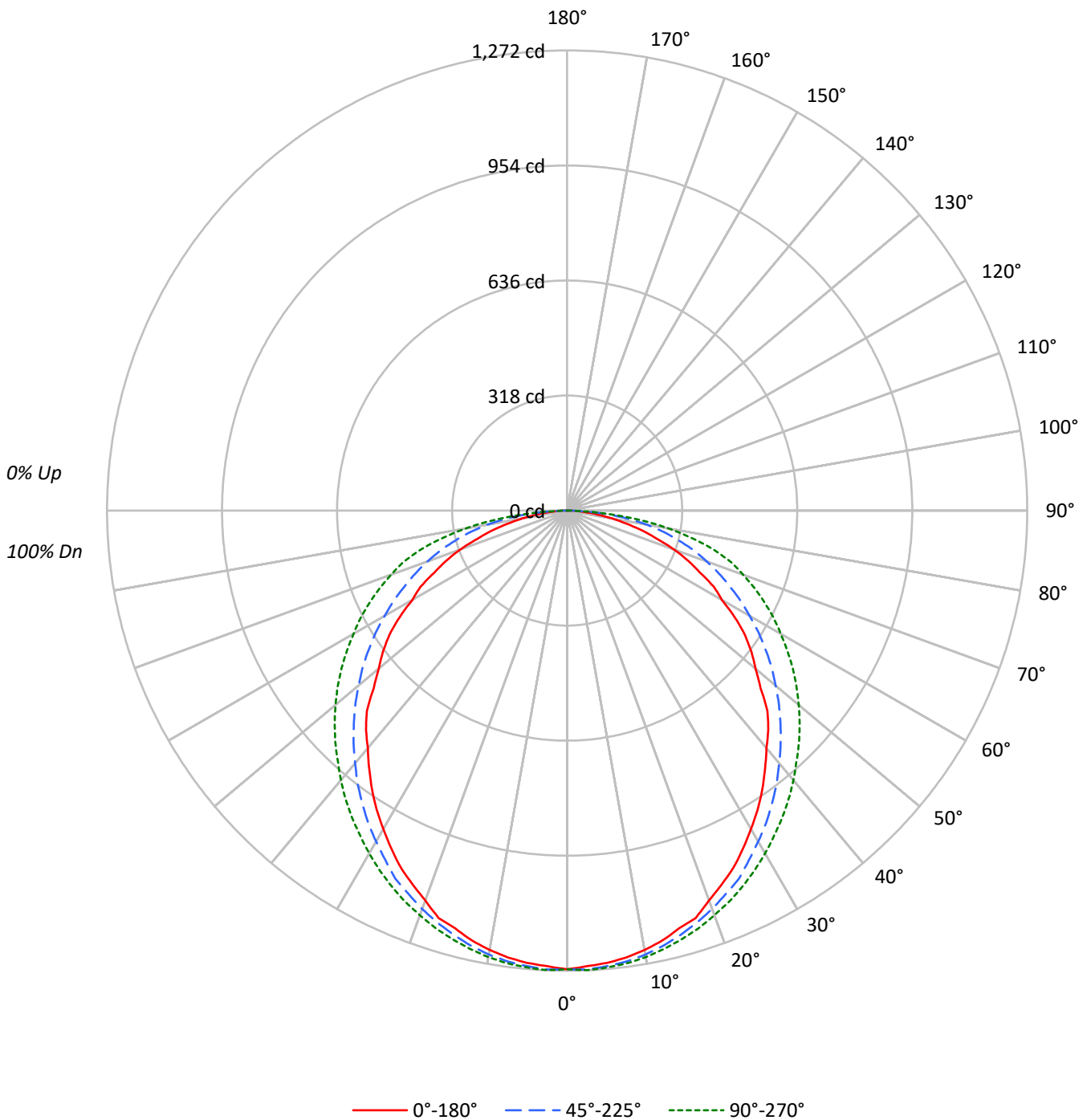
Lumens per Lamp: N/A  
Luminaire Lumens: 3779.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 42.7  
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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3412	3412	3412
5°	3391	3415	3425
10°	3371	3405	3425
15°	3331	3381	3416
20°	3284	3356	3408
25°	3233	3335	3405
30°	3159	3282	3400
35°	3090	3244	3405
40°	3012	3202	3418
45°	2981	3173	3449
50°	2847	3150	3498
55°	2817	3140	3573
60°	2658	3134	3670
65°	2579	3156	3835
70°	2476	3231	4070
75°	2256	3328	4381
80°	1934	3448	4429
85°	1562	3294	3798



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.0	3.2
10°-20°	342.2	9.1
20°-30°	515.1	13.6
30°-40°	618.2	16.4
40°-50°	646.2	17.1
50°-60°	602.2	15.9
60°-70°	493.9	13.1
70°-80°	332.8	8.8
80°-90°	108.4	2.9
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°	977.3	25.9
0°-40°	1595.6	42.2
0°-60°	2843.9	75.3
0°-90°	3779.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3779.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1268	1268	1268	1268	1268	
5°	1255	1259	1264	1266	1268	119
15°	1196	1203	1214	1224	1226	338
25°	1089	1096	1123	1140	1147	501
35°	940	953	988	1022	1036	588
45°	783	789	834	884	906	598
55°	600	611	669	732	762	532
65°	405	423	496	568	602	403
75°	217	241	320	392	421	228
85°	51	72	107	125	123	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1267.9	1267.9	1267.9	1267.9	1267.9
2.5°	1260.7	1264.3	1269.7	1271.5	1271.5
5°	1255.2	1258.8	1264.3	1266.1	1267.9
7.5°	1246.2	1249.8	1257.0	1260.7	1262.5
10°	1233.5	1237.1	1246.2	1251.6	1253.4
12.5°	1217.2	1220.9	1231.7	1238.9	1240.8
15°	1195.5	1202.8	1213.6	1224.5	1226.3
17.5°	1181.1	1179.3	1193.7	1206.4	1210.0
20°	1146.7	1155.7	1172.0	1186.5	1190.1
22.5°	1117.8	1125.0	1146.7	1163.0	1170.2
25°	1088.8	1096.1	1123.2	1139.5	1146.7
27.5°	1052.7	1063.5	1088.8	1112.3	1121.4
30°	1016.5	1027.3	1056.3	1083.4	1094.3
32.5°	980.3	993.0	1023.7	1052.7	1065.3
35°	940.5	953.2	987.5	1021.9	1036.4
37.5°	898.9	915.2	951.4	989.3	1005.6
40°	857.3	873.6	911.6	955.0	973.1
42.5°	823.0	830.2	873.6	920.6	938.7
45°	783.2	788.6	833.8	884.4	906.2
47.5°	725.3	745.2	794.0	850.1	871.8
50°	680.1	701.8	752.4	812.1	835.6
52.5°	642.1	656.6	712.6	772.3	799.4
55°	600.5	611.3	669.2	732.5	761.5
57.5°	549.8	569.7	627.6	692.7	721.7
60°	493.8	519.1	582.4	652.9	681.9
62.5°	457.6	472.1	540.8	611.3	643.9
65°	405.1	423.2	495.6	567.9	602.3
67.5°	361.7	379.8	454.0	526.3	560.7
70°	314.7	332.8	410.6	482.9	517.3
72.5°	260.5	285.8	367.2	439.5	475.7
75°	217.0	240.6	320.1	392.5	421.4
77.5°	168.2	199.0	273.1	332.8	354.5
80°	124.8	155.5	222.5	265.9	285.8
82.5°	85.0	115.8	166.4	199.0	209.8
85°	50.6	72.3	106.7	124.8	123.0
87.5°	23.5	30.7	43.4	43.4	41.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)