

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: P271956

Luminaire Tested: **14CZ2-39HE-S-UNV-L950-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: P271956  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39HE-S-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI  
Light Source: (196) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.    Condition    Description

**Summary**

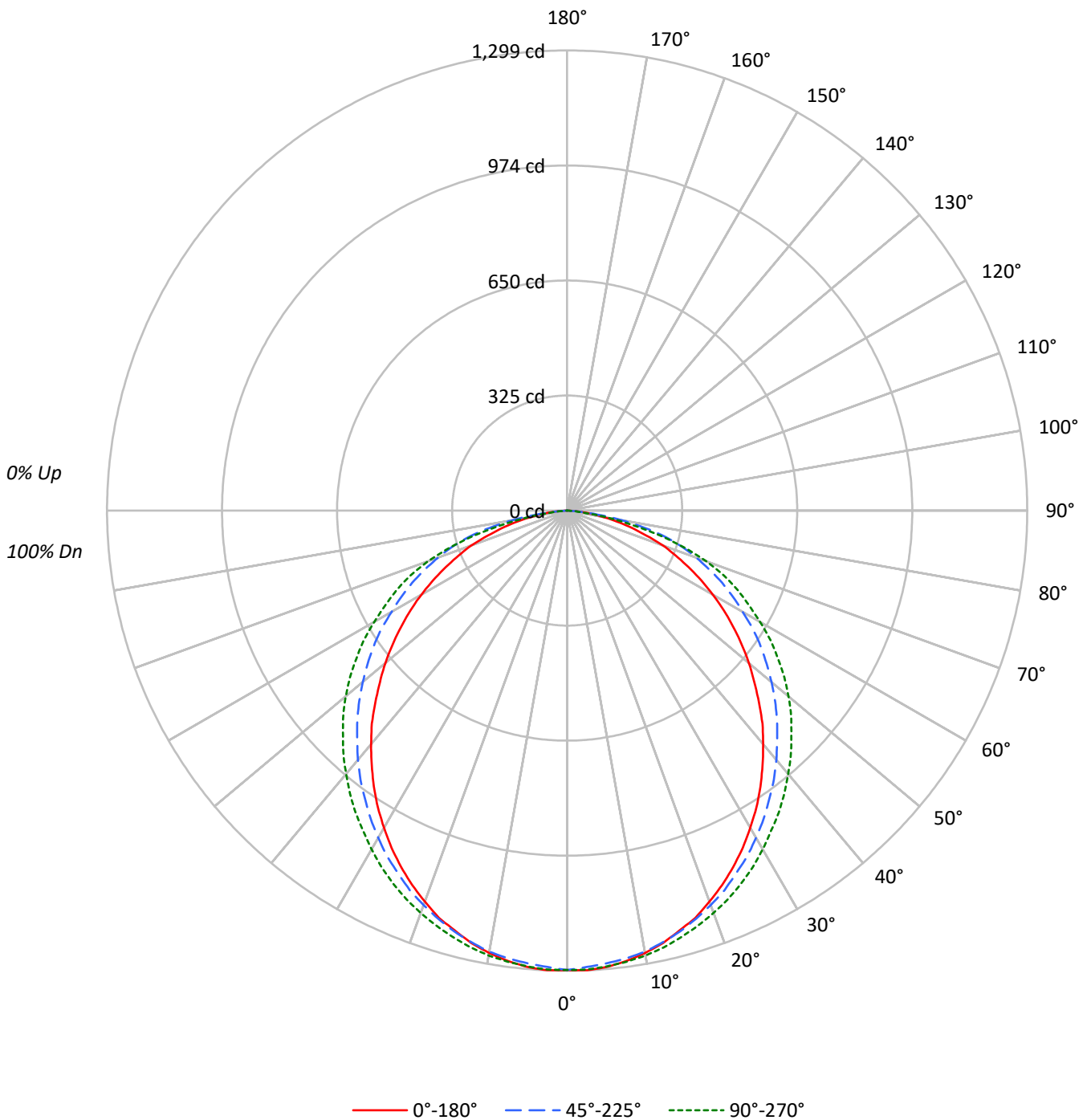
Lumens per Lamp: N/A  
Luminaire Lumens: 3633.0 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.3  
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	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3490	3490	3490
5°	3494	3464	3489
10°	3465	3455	3485
15°	3417	3428	3473
20°	3363	3394	3461
25°	3295	3353	3450
30°	3213	3314	3431
35°	3124	3266	3420
40°	3025	3227	3411
45°	2913	3188	3407
50°	2805	3152	3416
55°	2687	3127	3406
60°	2559	3083	3383
65°	2409	3074	3384
70°	2268	3047	3288
75°	1966	2978	2809
80°	1592	2400	1870
85°	1056	834	556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.5	3.4
10°-20°	348.5	9.6
20°-30°	522.7	14.4
30°-40°	623.6	17.2
40°-50°	644.7	17.7
50°-60°	588.6	16.2
60°-70°	463.2	12.7
70°-80°	269.6	7.4
80°-90°	49.7	1.4
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°	993.7	27.4
0°-40°	1617.3	44.5
0°-60°	2850.5	78.5
0°-90°	3633.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3633.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1297	1297	1297	1297	1297	
5°	1293	1290	1282	1293	1292	123
15°	1227	1228	1230	1246	1246	346
25°	1110	1115	1129	1156	1162	511
35°	951	964	994	1032	1041	594
45°	766	791	838	884	895	591
55°	573	603	666	715	726	512
65°	378	418	483	521	531	376
75°	189	234	286	281	270	201
85°	34	49	27	22	18	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1296.9	1296.9	1296.9	1296.9	1296.9
2.5°	1298.7	1295.1	1289.7	1298.7	1296.9
5°	1293.3	1289.7	1282.5	1293.3	1291.5
7.5°	1282.5	1278.9	1275.3	1286.1	1284.3
10°	1268.1	1266.3	1264.5	1277.1	1275.3
12.5°	1250.1	1250.1	1248.3	1262.7	1262.7
15°	1226.7	1228.5	1230.3	1246.5	1246.5
17.5°	1205.1	1203.3	1208.7	1226.7	1228.5
20°	1174.4	1178.0	1185.2	1206.9	1208.7
22.5°	1143.8	1147.4	1160.0	1181.6	1187.0
25°	1109.6	1115.0	1129.4	1156.4	1161.8
27.5°	1073.6	1080.8	1100.6	1129.4	1134.8
30°	1033.9	1044.7	1066.4	1098.8	1104.2
32.5°	994.3	1005.1	1032.1	1064.6	1071.8
35°	951.1	963.7	994.3	1032.1	1041.1
37.5°	906.0	922.3	958.3	996.1	1006.9
40°	861.0	879.0	918.7	958.3	970.9
42.5°	816.0	834.0	877.2	922.3	934.9
45°	765.5	790.8	837.6	884.4	895.2
47.5°	716.9	743.9	796.2	843.0	857.4
50°	670.1	697.1	752.9	801.6	816.0
52.5°	621.4	650.3	709.7	760.1	772.7
55°	572.8	603.4	666.5	715.1	725.9
57.5°	524.2	556.6	621.4	668.3	680.9
60°	475.5	509.8	572.8	619.6	628.6
62.5°	426.9	462.9	527.8	569.2	578.2
65°	378.3	417.9	482.7	520.6	531.4
67.5°	331.4	371.1	434.1	470.1	479.1
70°	288.2	324.2	387.3	414.3	417.9
72.5°	234.2	279.2	340.4	354.9	345.8
75°	189.1	234.2	286.4	281.0	270.2
77.5°	144.1	189.1	223.4	205.3	190.9
80°	102.7	147.7	154.9	127.9	120.7
82.5°	66.6	102.7	86.5	66.6	54.0
85°	34.2	48.6	27.0	21.6	18.0
87.5°	10.8	7.2	3.6	3.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)