

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: P475392

Luminaire Tested: **14CZ2-39HE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475392  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39HE-S-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

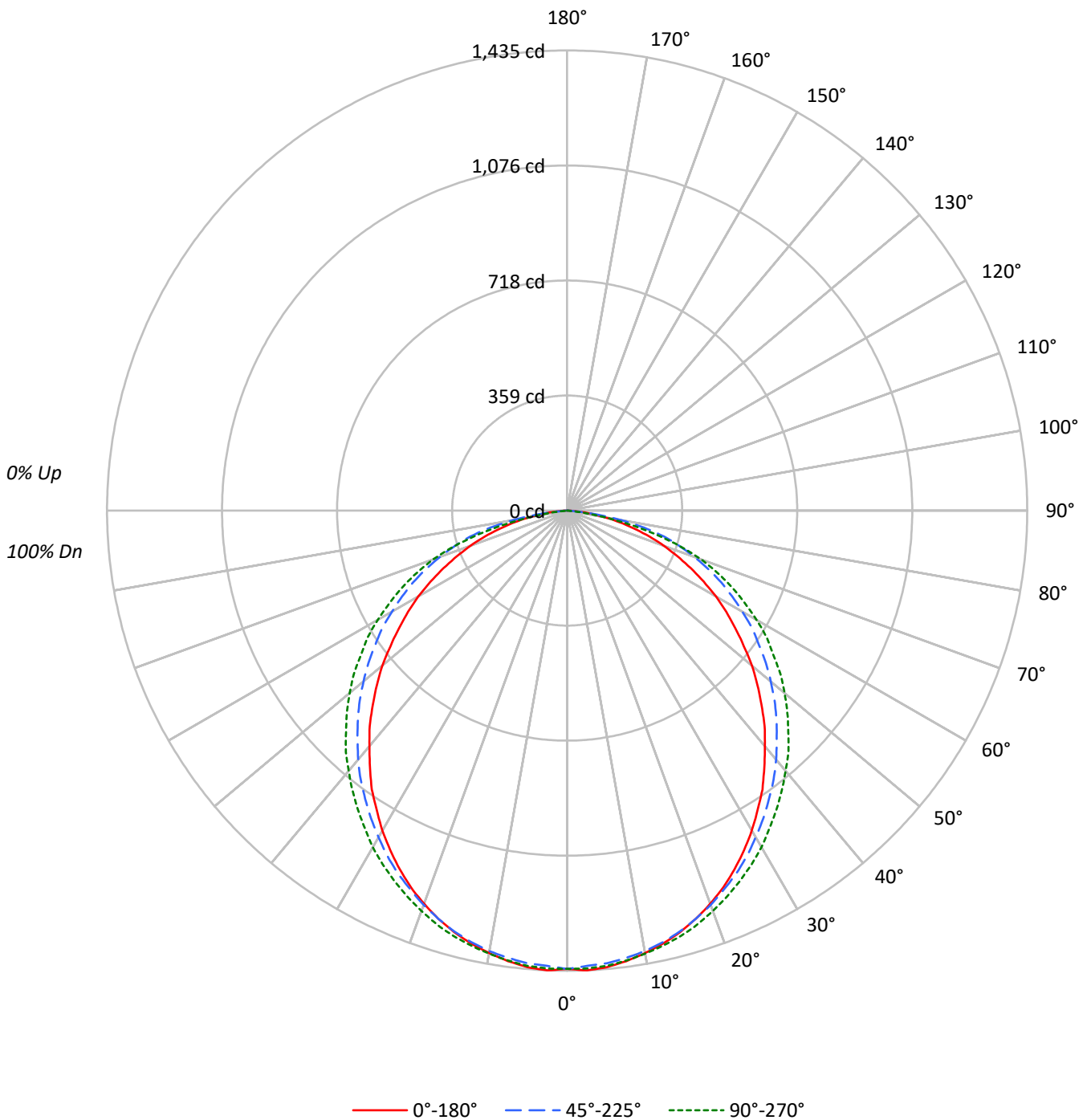
Lumens per Lamp: N/A  
Luminaire Lumens: 3994.8 lumens  
Efficiency: N/A  
Efficacy: 140.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.4  
Input Voltage (V): 120  
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	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	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	36	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	29	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°	3846	3846	3846
5°	3860	3828	3850
10°	3828	3812	3834
15°	3791	3786	3825
20°	3736	3748	3805
25°	3665	3707	3784
30°	3580	3655	3767
35°	3488	3607	3739
40°	3370	3561	3723
45°	3262	3514	3712
50°	3151	3471	3706
55°	3004	3428	3682
60°	2884	3392	3673
65°	2709	3374	3617
70°	2527	3316	3490
75°	2233	3255	2942
80°	1804	2644	1742
85°	1303	744	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.1	3.4
10°-20°	384.8	9.6
20°-30°	577.3	14.5
30°-40°	688.2	17.2
40°-50°	710.6	17.8
50°-60°	647.2	16.2
60°-70°	507.1	12.7
70°-80°	293.4	7.3
80°-90°	51.0	1.3
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°	1097.3	27.5
0°-40°	1785.5	44.7
0°-60°	3143.4	78.7
0°-90°	3994.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3994.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1429	1425	1417	1427	1425	135
15°	1361	1359	1359	1373	1373	384
25°	1234	1238	1248	1273	1275	568
35°	1062	1072	1098	1132	1138	662
45°	857	879	923	966	976	662
55°	640	672	731	777	785	574
65°	426	464	530	564	568	422
75°	215	261	313	303	283	229
85°	42	56	24	8	6	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1429.1	1429.1	1429.1	1429.1	1429.1
2.5°	1435.1	1429.1	1421.1	1429.1	1429.1
5°	1429.1	1425.1	1417.1	1427.1	1425.1
7.5°	1417.1	1413.1	1407.0	1417.1	1415.1
10°	1401.0	1399.0	1395.0	1407.0	1403.0
12.5°	1383.0	1381.0	1378.9	1391.0	1389.0
15°	1360.9	1358.9	1358.9	1372.9	1372.9
17.5°	1334.8	1334.8	1334.8	1352.9	1352.9
20°	1304.7	1304.7	1308.7	1328.8	1328.8
22.5°	1272.6	1272.6	1278.6	1300.7	1302.7
25°	1234.4	1238.4	1248.5	1272.6	1274.6
27.5°	1194.3	1200.3	1214.4	1240.4	1244.5
30°	1152.1	1158.2	1176.2	1206.3	1212.3
32.5°	1106.0	1116.0	1138.1	1168.2	1174.2
35°	1061.8	1071.8	1097.9	1132.1	1138.1
37.5°	1009.6	1025.7	1057.8	1089.9	1099.9
40°	959.4	977.5	1013.6	1051.8	1059.8
42.5°	911.3	927.3	967.5	1009.6	1021.7
45°	857.1	879.2	923.3	965.5	975.5
47.5°	804.9	827.0	877.1	921.3	931.3
50°	752.7	774.8	829.0	873.1	885.2
52.5°	694.5	726.6	780.8	825.0	839.0
55°	640.3	672.4	730.6	776.8	784.8
57.5°	588.1	620.2	684.5	726.6	738.6
60°	535.9	568.0	630.3	672.4	682.4
62.5°	479.7	515.8	580.1	616.2	624.2
65°	425.5	463.7	529.9	564.0	568.0
67.5°	371.3	411.5	475.7	503.8	507.8
70°	321.2	361.3	421.5	447.6	443.6
72.5°	269.0	309.1	367.3	381.4	369.3
75°	214.8	260.9	313.1	303.1	283.0
77.5°	166.6	210.8	244.9	214.8	198.7
80°	116.4	162.6	170.6	132.5	112.4
82.5°	76.3	114.4	92.3	56.2	50.2
85°	42.2	56.2	24.1	8.0	6.0
87.5°	14.1	8.0	4.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)