

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: P475383

Luminaire Tested: **14CZ2-39HE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475383  
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-L830-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

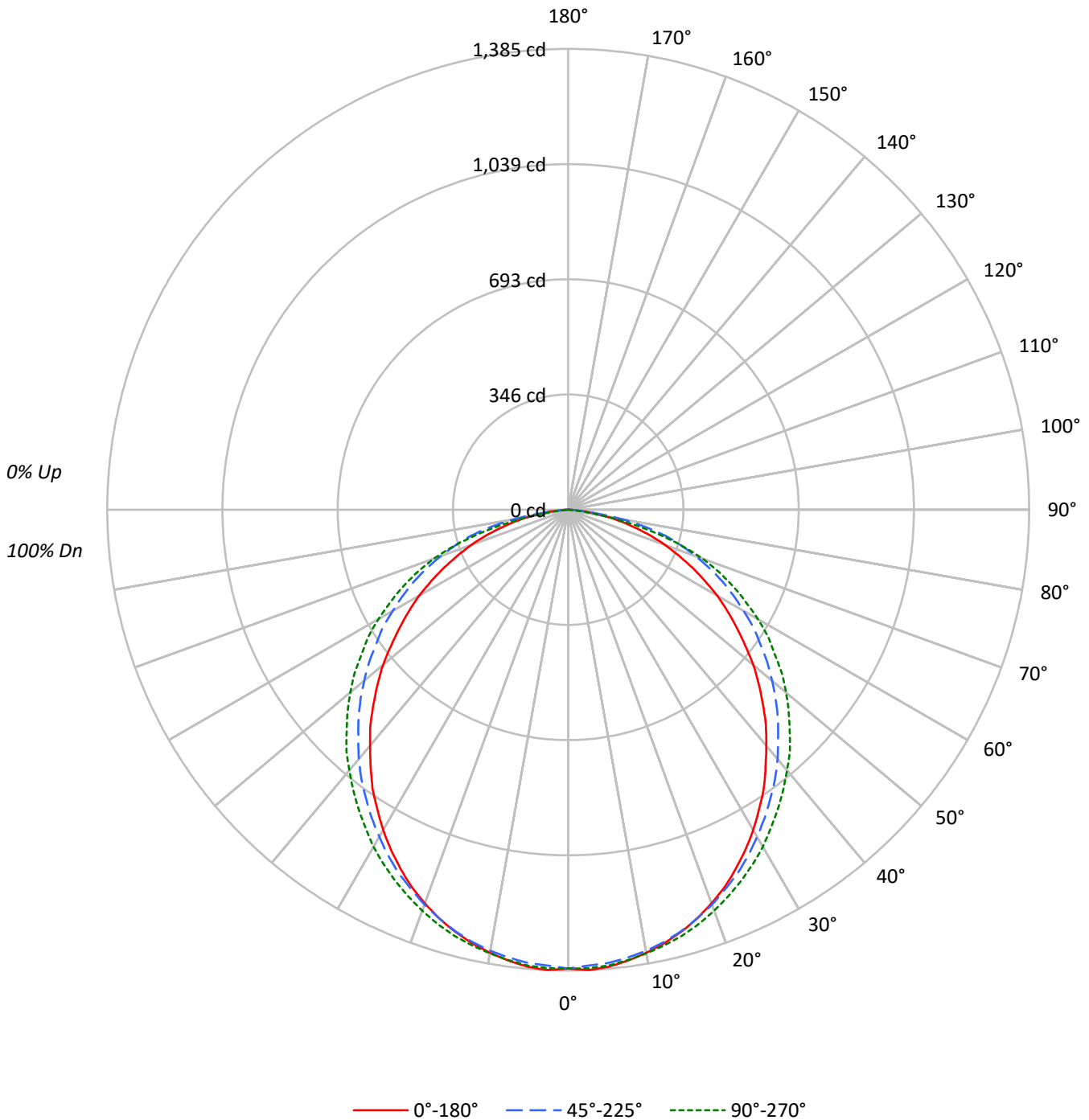
Lumens per Lamp: N/A  
Luminaire Lumens: 3855.0 lumens  
Efficiency: N/A  
Efficacy: 135.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	3711	3711	3711
5°	3725	3694	3715
10°	3694	3678	3700
15°	3658	3653	3691
20°	3605	3617	3672
25°	3537	3577	3652
30°	3455	3527	3635
35°	3366	3481	3608
40°	3253	3436	3593
45°	3148	3391	3583
50°	3041	3349	3576
55°	2899	3308	3553
60°	2784	3273	3545
65°	2614	3256	3491
70°	2438	3201	3368
75°	2155	3142	2839
80°	1740	2551	1681
85°	1257	716	179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.4	3.4
10°-20°	371.4	9.6
20°-30°	557.1	14.5
30°-40°	664.1	17.2
40°-50°	685.8	17.8
50°-60°	624.6	16.2
60°-70°	489.3	12.7
70°-80°	283.1	7.3
80°-90°	49.2	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°	1058.9	27.5
0°-40°	1723.0	44.7
0°-60°	3033.3	78.7
0°-90°	3855.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3855.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1379	1379	1379	1379	1379	
5°	1379	1375	1368	1377	1375	131
15°	1313	1311	1311	1325	1325	370
25°	1191	1195	1205	1228	1230	548
35°	1025	1034	1060	1092	1098	639
45°	827	848	891	932	941	639
55°	618	649	705	750	757	554
65°	411	447	511	544	548	407
75°	207	252	302	292	273	221
85°	41	54	23	8	6	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1379.1	1379.1	1379.1	1379.1	1379.1
2.5°	1384.9	1379.1	1371.4	1379.1	1379.1
5°	1379.1	1375.2	1367.5	1377.2	1375.2
7.5°	1367.5	1363.6	1357.8	1367.5	1365.5
10°	1352.0	1350.1	1346.2	1357.8	1353.9
12.5°	1334.6	1332.6	1330.7	1342.3	1340.4
15°	1313.2	1311.3	1311.3	1324.9	1324.9
17.5°	1288.1	1288.1	1288.1	1305.5	1305.5
20°	1259.0	1259.0	1262.9	1282.3	1282.3
22.5°	1228.0	1228.0	1233.8	1255.1	1257.1
25°	1191.2	1195.1	1204.8	1228.0	1230.0
27.5°	1152.5	1158.3	1171.9	1197.0	1200.9
30°	1111.8	1117.6	1135.0	1164.1	1169.9
32.5°	1067.3	1076.9	1098.2	1127.3	1133.1
35°	1024.6	1034.3	1059.5	1092.4	1098.2
37.5°	974.3	989.8	1020.8	1051.8	1061.4
40°	925.9	943.3	978.2	1015.0	1022.7
42.5°	879.4	894.9	933.6	974.3	985.9
45°	827.1	848.4	891.0	931.7	941.4
47.5°	776.7	798.0	846.4	889.1	898.7
50°	726.4	747.7	800.0	842.6	854.2
52.5°	670.2	701.2	753.5	796.1	809.6
55°	617.9	648.9	705.0	749.6	757.3
57.5°	567.5	598.5	660.5	701.2	712.8
60°	517.2	548.2	608.2	648.9	658.6
62.5°	462.9	497.8	559.8	594.6	602.4
65°	410.6	447.4	511.4	544.3	548.2
67.5°	358.3	397.1	459.1	486.2	490.0
70°	309.9	348.6	406.8	431.9	428.1
72.5°	259.6	298.3	354.5	368.0	356.4
75°	207.3	251.8	302.2	292.5	273.1
77.5°	160.8	203.4	236.3	207.3	191.8
80°	112.3	156.9	164.6	127.8	108.5
82.5°	73.6	110.4	89.1	54.2	48.4
85°	40.7	54.2	23.2	7.7	5.8
87.5°	13.6	7.7	3.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)