

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: P475428

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475428  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39HE-RDP-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2623.5 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

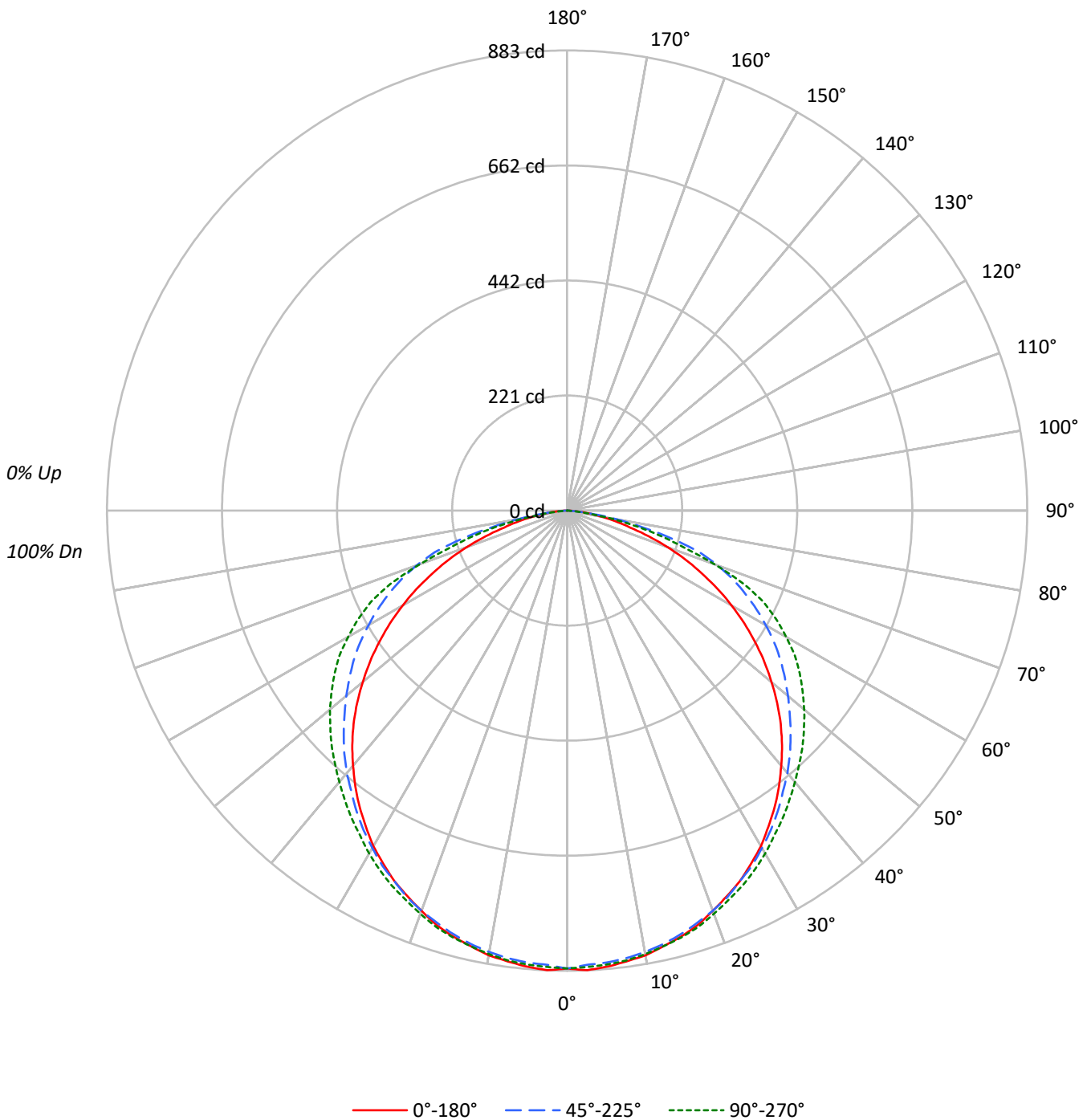
Input Watts (W): 28.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	97	94	91	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2365	2365	2365
5°	2374	2351	2363
10°	2367	2350	2362
15°	2357	2345	2362
20°	2340	2340	2358
25°	2329	2329	2360
30°	2310	2323	2361
35°	2281	2315	2369
40°	2245	2310	2389
45°	2206	2307	2432
50°	2143	2315	2487
55°	2066	2345	2556
60°	1962	2370	2612
65°	1813	2400	2648
70°	1611	2417	2369
75°	1299	2172	1895
80°	1015	1523	1238
85°	695	442	315



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.2	3.2
10°-20°	238.6	9.1
20°-30°	363.3	13.8
30°-40°	442.5	16.9
40°-50°	469.5	17.9
50°-60°	443.1	16.9
60°-70°	357.8	13.6
70°-80°	194.1	7.4
80°-90°	31.4	1.2
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°	685.1	26.1
0°-40°	1127.6	43.0
0°-60°	2040.2	77.8
0°-90°	2623.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2623.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	879	877	870	877	875	83
15°	846	844	842	848	848	239
25°	784	782	784	793	795	361
35°	694	698	705	719	721	434
45°	580	588	606	629	639	446
55°	440	459	500	532	545	393
65°	285	320	377	408	416	282
75°	125	182	209	188	182	136
85°	22	25	14	12	10	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	878.7	878.7	878.7	878.7	878.7
2.5°	882.8	878.7	872.5	878.7	876.6
5°	878.7	876.6	870.5	876.6	874.6
7.5°	872.5	872.5	866.4	870.5	870.5
10°	866.4	864.3	860.2	866.4	864.3
12.5°	856.1	854.1	852.0	858.2	856.1
15°	845.9	843.9	841.8	847.9	847.9
17.5°	833.6	831.6	829.5	837.7	837.7
20°	817.2	817.2	817.2	825.4	823.4
22.5°	800.8	800.8	802.9	811.1	809.0
25°	784.5	782.4	784.5	792.6	794.7
27.5°	764.0	766.0	768.1	776.3	778.3
30°	743.5	745.5	747.6	757.8	759.9
32.5°	718.9	723.0	727.1	739.4	739.4
35°	694.3	698.4	704.6	718.9	721.0
37.5°	667.7	671.8	680.0	696.4	700.5
40°	639.0	645.2	657.5	673.9	680.0
42.5°	610.4	618.6	632.9	651.3	659.5
45°	579.6	587.8	606.3	628.8	639.0
47.5°	546.9	557.1	579.6	608.3	616.5
50°	512.0	526.4	553.0	583.7	594.0
52.5°	477.2	493.6	526.4	559.2	569.4
55°	440.4	458.8	499.8	532.5	544.8
57.5°	403.5	424.0	471.1	505.9	518.2
60°	364.6	389.2	440.4	475.2	485.4
62.5°	325.7	354.3	409.6	444.5	452.6
65°	284.7	319.5	376.9	407.6	415.8
67.5°	245.8	286.7	344.1	366.6	366.6
70°	204.8	249.9	307.2	313.4	301.1
72.5°	163.9	215.1	266.3	243.7	233.5
75°	124.9	182.3	208.9	188.4	182.3
77.5°	94.2	147.5	147.5	135.2	131.1
80°	65.5	112.6	98.3	86.0	79.9
82.5°	43.0	63.5	51.2	41.0	34.8
85°	22.5	24.6	14.3	12.3	10.2
87.5°	8.2	4.1	2.0	4.1	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)