

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: P475089

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475089  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-39HE-RDP-UNV-L850-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS W/ RDP INSERT  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2728.9 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

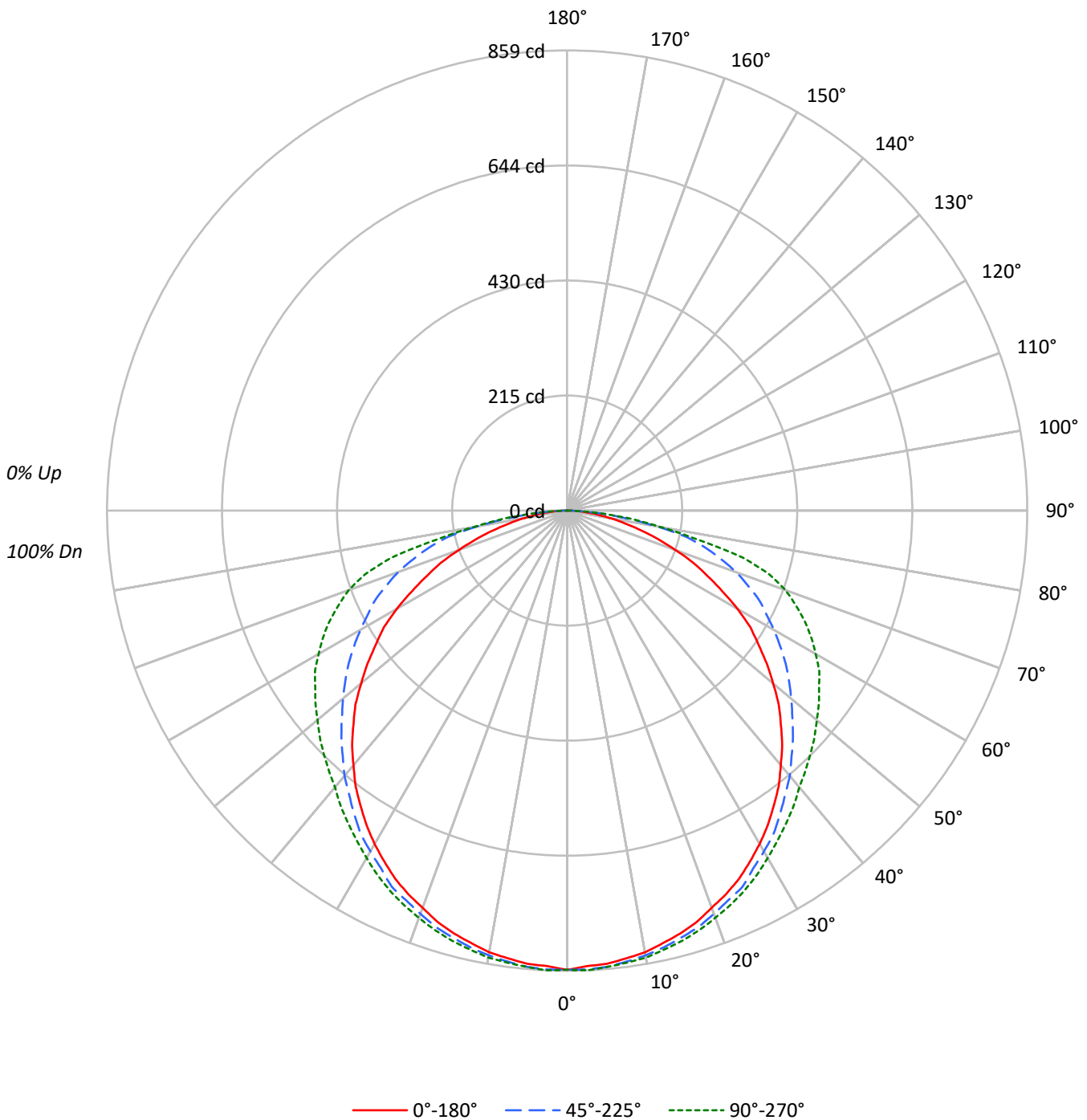
Input Watts (W): 28.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89		92	89	86		88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60		70	64	59		67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50		61	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

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

	0°	45°	90°
0°	2307	2307	2307
5°	2294	2310	2310
10°	2287	2304	2315
15°	2276	2298	2315
20°	2259	2294	2317
25°	2253	2301	2325
30°	2233	2283	2327
35°	2209	2275	2341
40°	2179	2270	2369
45°	2147	2269	2444
50°	2101	2286	2546
55°	2044	2336	2693
60°	1977	2398	2885
65°	1840	2519	3119
70°	1690	2638	3412
75°	1483	2775	3528
80°	1277	2644	2769
85°	1115	1920	2106



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.1	3.0
10°-20°	232.8	8.5
20°-30°	355.2	13.0
30°-40°	433.7	15.9
40°-50°	463.7	17.0
50°-60°	447.6	16.4
60°-70°	385.3	14.1
70°-80°	260.7	9.6
80°-90°	68.8	2.5
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°	669.1	24.5
0°-40°	1102.8	40.4
0°-60°	2014.1	73.8
0°-90°	2728.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2728.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	857	857	857	857	857	
5°	849	851	855	855	855	81
15°	817	819	825	829	831	230
25°	759	763	775	779	783	349
35°	672	678	693	707	713	421
45°	564	574	596	626	642	435
55°	436	450	498	548	574	390
65°	289	317	396	458	490	287
75°	143	189	267	321	339	153
85°	36	50	62	64	68	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	857.2	857.2	857.2	857.2	857.2
2.5°	851.2	853.2	857.2	857.2	859.2
5°	849.2	851.2	855.2	855.2	855.2
7.5°	843.2	845.2	849.2	851.2	851.2
10°	837.0	839.2	843.2	845.2	847.2
12.5°	827.0	829.0	835.0	839.2	839.2
15°	817.1	819.1	825.0	829.0	831.0
17.5°	804.9	809.1	815.1	819.1	821.1
20°	788.9	792.9	800.9	807.1	809.1
22.5°	775.0	779.0	786.9	792.9	796.9
25°	758.8	762.8	775.0	779.0	783.0
27.5°	738.7	742.9	752.8	760.8	766.8
30°	718.7	722.7	734.7	744.9	748.8
32.5°	696.6	702.6	716.7	724.7	730.7
35°	672.4	678.4	692.6	706.6	712.7
37.5°	648.5	654.5	668.5	686.6	694.6
40°	620.4	628.4	646.3	670.4	674.4
42.5°	594.2	604.2	620.4	648.5	658.5
45°	564.1	574.1	596.2	626.4	642.3
47.5°	536.0	546.0	570.1	606.2	626.4
50°	501.9	515.9	546.0	588.3	608.2
52.5°	469.8	481.7	522.0	568.1	592.3
55°	435.7	449.6	497.9	548.0	574.1
57.5°	405.5	417.5	471.8	528.0	558.1
60°	367.4	383.4	445.6	505.9	536.0
62.5°	327.1	351.3	419.5	481.7	513.9
65°	289.0	317.2	395.6	457.6	489.9
67.5°	254.9	285.1	365.4	431.7	461.8
70°	214.8	252.9	335.3	399.6	433.7
72.5°	178.7	220.8	301.2	365.4	395.6
75°	142.6	188.7	266.9	321.2	339.3
77.5°	110.3	154.6	228.8	245.0	247.0
80°	82.4	122.5	170.6	172.5	178.7
82.5°	56.3	86.4	110.3	120.5	122.5
85°	36.1	50.3	62.2	64.2	68.2
87.5°	16.2	18.2	22.1	20.1	20.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)