

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: P475031

Luminaire Tested: **22CZ2-39HE-RDP-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475031
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-L835-CD1-U
Description: 2'X2' 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: 2678.1 lumens
Efficiency: N/A
Efficacy: 94.0 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

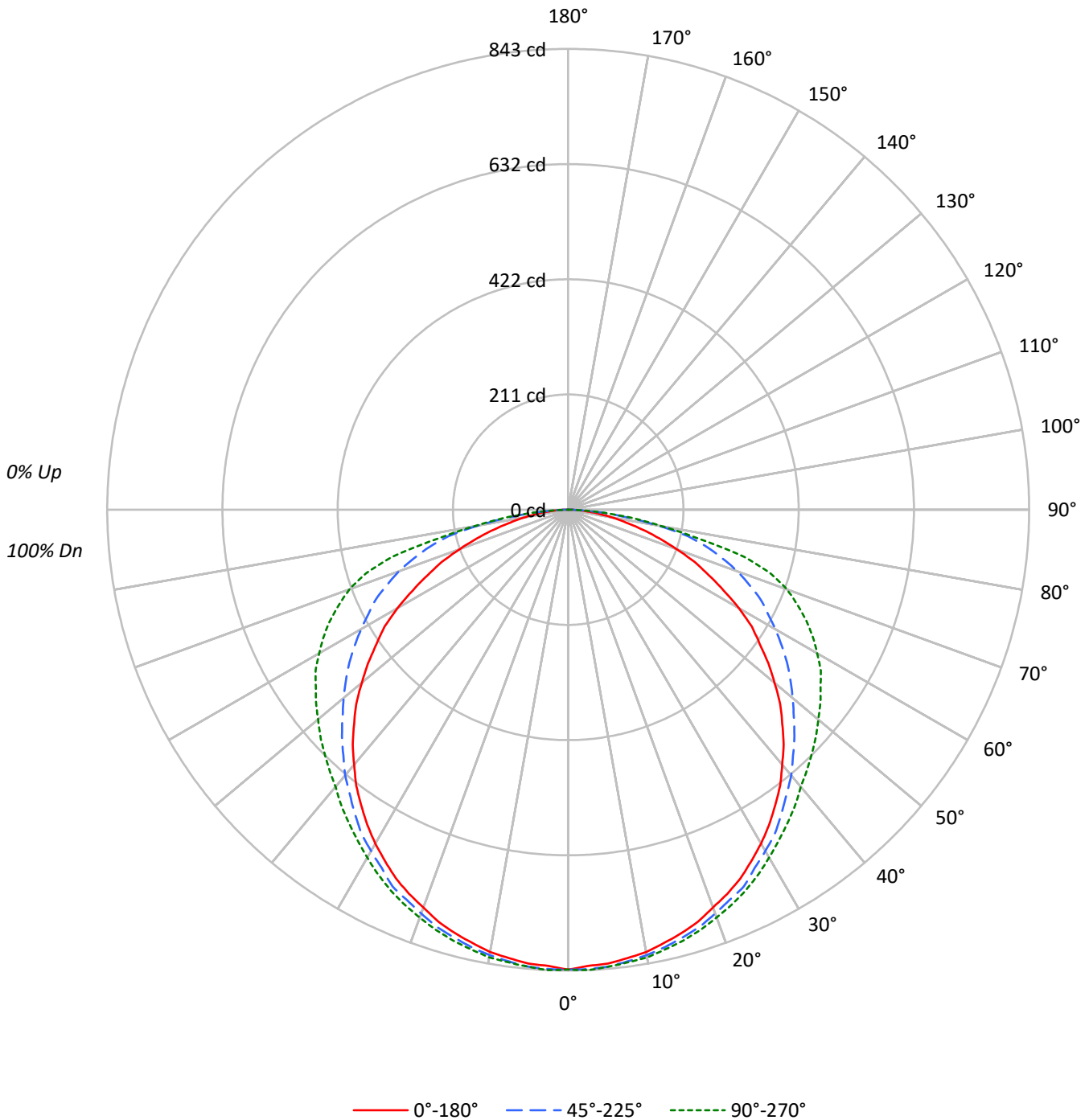
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2264	2264	2264
5°	2251	2267	2267
10°	2244	2261	2272
15°	2234	2256	2272
20°	2217	2251	2274
25°	2211	2258	2282
30°	2192	2240	2284
35°	2168	2233	2298
40°	2139	2228	2325
45°	2107	2227	2399
50°	2062	2243	2499
55°	2006	2292	2643
60°	1941	2354	2831
65°	1806	2472	3061
70°	1659	2589	3349
75°	1456	2723	3462
80°	1252	2594	2718
85°	1093	1886	2066



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.6	3.0
10°-20°	228.5	8.5
20°-30°	348.6	13.0
30°-40°	425.6	15.9
40°-50°	455.1	17.0
50°-60°	439.2	16.4
60°-70°	378.1	14.1
70°-80°	255.8	9.6
80°-90°	67.5	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°	656.6	24.5
0°-40°	1082.2	40.4
0°-60°	1976.6	73.8
0°-90°	2678.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	841	841	841	841	841	
5°	833	835	839	839	839	79
15°	802	804	810	814	816	226
25°	745	749	760	764	768	343
35°	660	666	680	693	699	413
45°	554	563	585	615	630	427
55°	428	441	489	538	563	383
65°	284	311	388	449	481	282
75°	140	185	262	315	333	150
85°	35	49	61	63	67	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	841.2	841.2	841.2	841.2	841.2
2.5°	835.3	837.3	841.2	841.2	843.1
5°	833.3	835.3	839.2	839.2	839.2
7.5°	827.5	829.4	833.3	835.3	835.3
10°	821.4	823.6	827.5	829.4	831.4
12.5°	811.6	813.6	819.4	823.6	823.6
15°	801.8	803.8	809.7	813.6	815.5
17.5°	789.9	794.0	799.9	803.8	805.7
20°	774.2	778.1	786.0	792.0	794.0
22.5°	760.5	764.4	772.3	778.1	782.1
25°	744.7	748.6	760.5	764.4	768.4
27.5°	724.9	729.0	738.8	746.6	752.5
30°	705.3	709.2	721.0	731.0	734.9
32.5°	683.6	689.5	703.4	711.2	717.1
35°	659.9	665.8	679.7	693.4	699.4
37.5°	636.4	642.3	656.0	673.8	681.6
40°	608.8	616.6	634.3	657.9	661.9
42.5°	583.2	593.0	608.8	636.4	646.2
45°	553.6	563.4	585.1	614.7	630.3
47.5°	526.0	535.8	559.5	594.9	614.7
50°	492.5	506.2	535.8	577.3	596.9
52.5°	461.0	472.8	512.3	557.5	581.2
55°	427.5	441.2	488.6	537.8	563.4
57.5°	398.0	409.7	463.0	518.2	547.7
60°	360.6	376.2	437.3	496.4	526.0
62.5°	321.0	344.7	411.7	472.8	504.3
65°	283.7	311.3	388.2	449.1	480.8
67.5°	250.2	279.7	358.6	423.6	453.2
70°	210.8	248.2	329.1	392.1	425.6
72.5°	175.4	216.7	295.6	358.6	388.2
75°	140.0	185.2	261.9	315.2	333.0
77.5°	108.3	151.7	224.5	240.4	242.4
80°	80.8	120.2	167.4	169.3	175.4
82.5°	55.2	84.8	108.3	118.2	120.2
85°	35.4	49.3	61.1	63.0	66.9
87.5°	15.9	17.8	21.7	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)