

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: P277395

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277395  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2491.0 lumens  
Efficiency: N/A  
Efficacy: 138.1 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

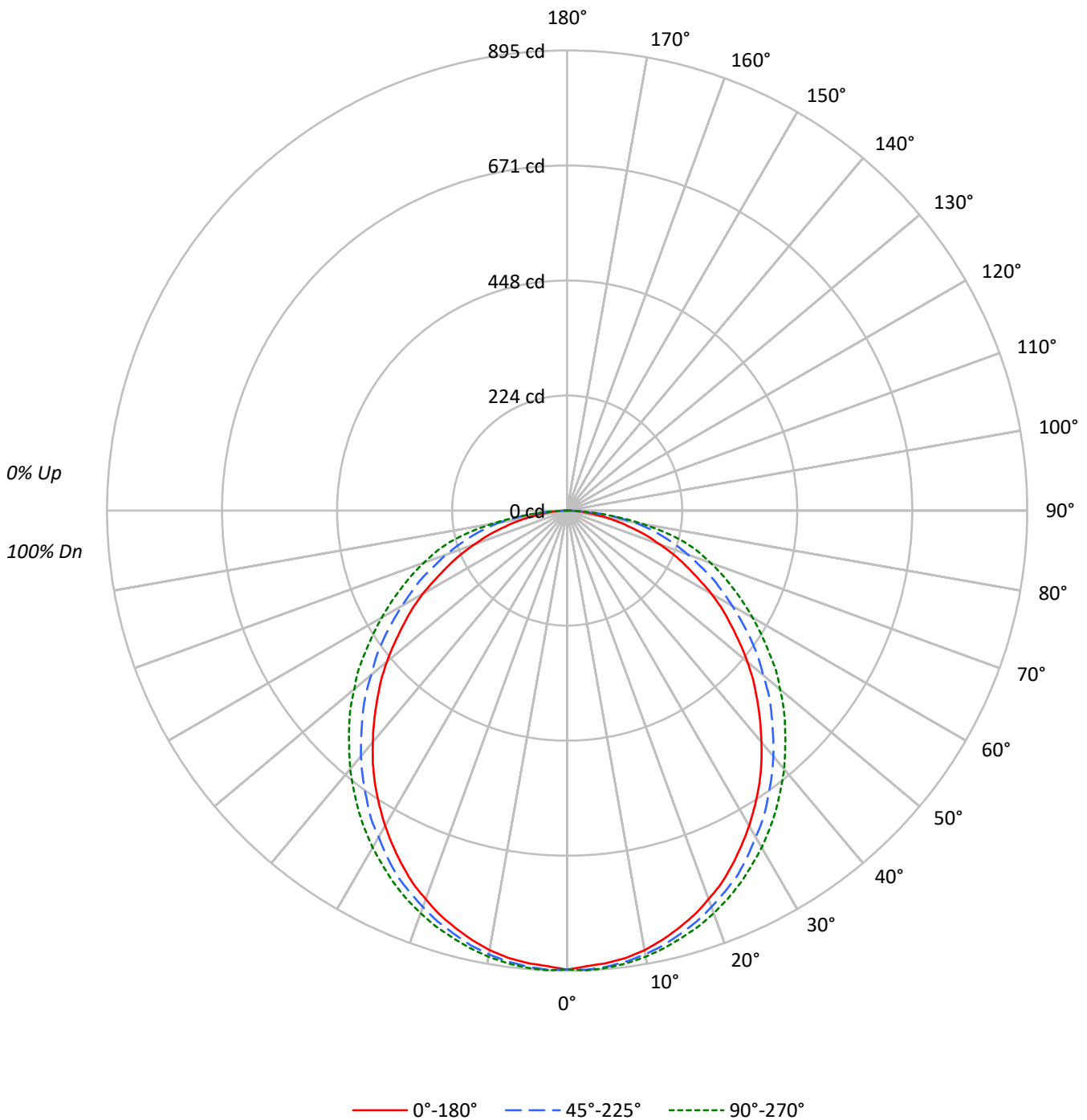
Input Watts (W): 18.042  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2402	2402	2402
5°	2386	2405	2411
10°	2372	2394	2407
15°	2341	2373	2396
20°	2303	2350	2386
25°	2257	2326	2371
30°	2199	2279	2351
35°	2138	2237	2329
40°	2066	2192	2307
45°	1990	2141	2282
50°	1917	2082	2262
55°	1827	2045	2246
60°	1745	1996	2239
65°	1628	1983	2264
70°	1500	1966	2332
75°	1354	1994	2453
80°	1170	2053	2306
85°	969	1723	1723



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.4	3.4
10°-20°	240.2	9.6
20°-30°	359.4	14.4
30°-40°	425.7	17.1
40°-50°	433.8	17.4
50°-60°	388.8	15.6
60°-70°	304.4	12.2
70°-80°	196.3	7.9
80°-90°	58.0	2.3
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°	684.1	27.5
0°-40°	1109.7	44.5
0°-60°	1932.3	77.6
0°-90°	2491.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2491.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	883	886	890	891	893	84
15°	840	845	852	859	860	237
25°	760	767	783	794	798	350
35°	651	659	681	702	709	407
45°	523	535	562	592	600	404
55°	389	402	436	466	479	349
65°	256	271	312	342	356	254
75°	130	150	192	224	236	140
85°	31	43	56	56	56	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	892.6	892.6	892.6	892.6	892.6
2.5°	886.8	889.1	893.8	894.9	894.9
5°	883.3	885.6	890.3	891.4	892.6
7.5°	877.5	878.7	884.5	886.8	888.0
10°	868.2	870.5	876.3	879.8	881.0
12.5°	855.4	858.9	865.9	870.5	871.7
15°	840.3	845.0	851.9	858.9	860.1
17.5°	824.0	828.7	838.0	846.1	848.4
20°	804.3	810.1	820.5	829.8	833.3
22.5°	784.5	789.2	801.9	813.6	817.1
25°	760.1	767.1	783.4	793.8	798.5
27.5°	734.5	742.7	758.9	772.9	777.5
30°	707.8	715.9	733.4	750.8	756.6
32.5°	679.9	689.2	710.1	727.6	733.4
35°	650.9	659.0	681.1	702.0	709.0
37.5°	620.6	627.6	653.2	675.3	682.2
40°	588.1	597.4	624.1	649.7	656.7
42.5°	555.6	566.0	592.7	620.6	627.6
45°	523.0	534.6	562.5	591.6	599.7
47.5°	491.6	500.9	532.3	560.2	571.8
50°	457.9	467.2	497.4	528.8	540.4
52.5°	423.1	435.8	468.4	498.6	512.5
55°	389.4	402.1	435.8	466.1	478.8
57.5°	358.0	368.4	403.3	434.7	447.5
60°	324.3	333.6	370.8	404.5	416.1
62.5°	288.2	302.2	340.5	371.9	385.9
65°	255.7	270.8	311.5	341.7	355.6
67.5°	225.5	239.4	278.9	311.5	326.6
70°	190.6	209.2	249.9	282.4	296.4
72.5°	162.7	179.0	220.8	253.4	268.5
75°	130.2	149.9	191.8	224.3	235.9
77.5°	103.4	123.2	162.7	188.3	194.1
80°	75.5	95.3	132.5	145.3	148.8
82.5°	51.1	69.7	95.3	98.8	100.0
85°	31.4	43.0	55.8	55.8	55.8
87.5°	15.1	17.4	19.8	18.6	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)