

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: P277397

Luminaire Tested: **22CZ2-24HE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277397  
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-6500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2503.0 lumens  
Efficiency: N/A  
Efficacy: 136.6 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

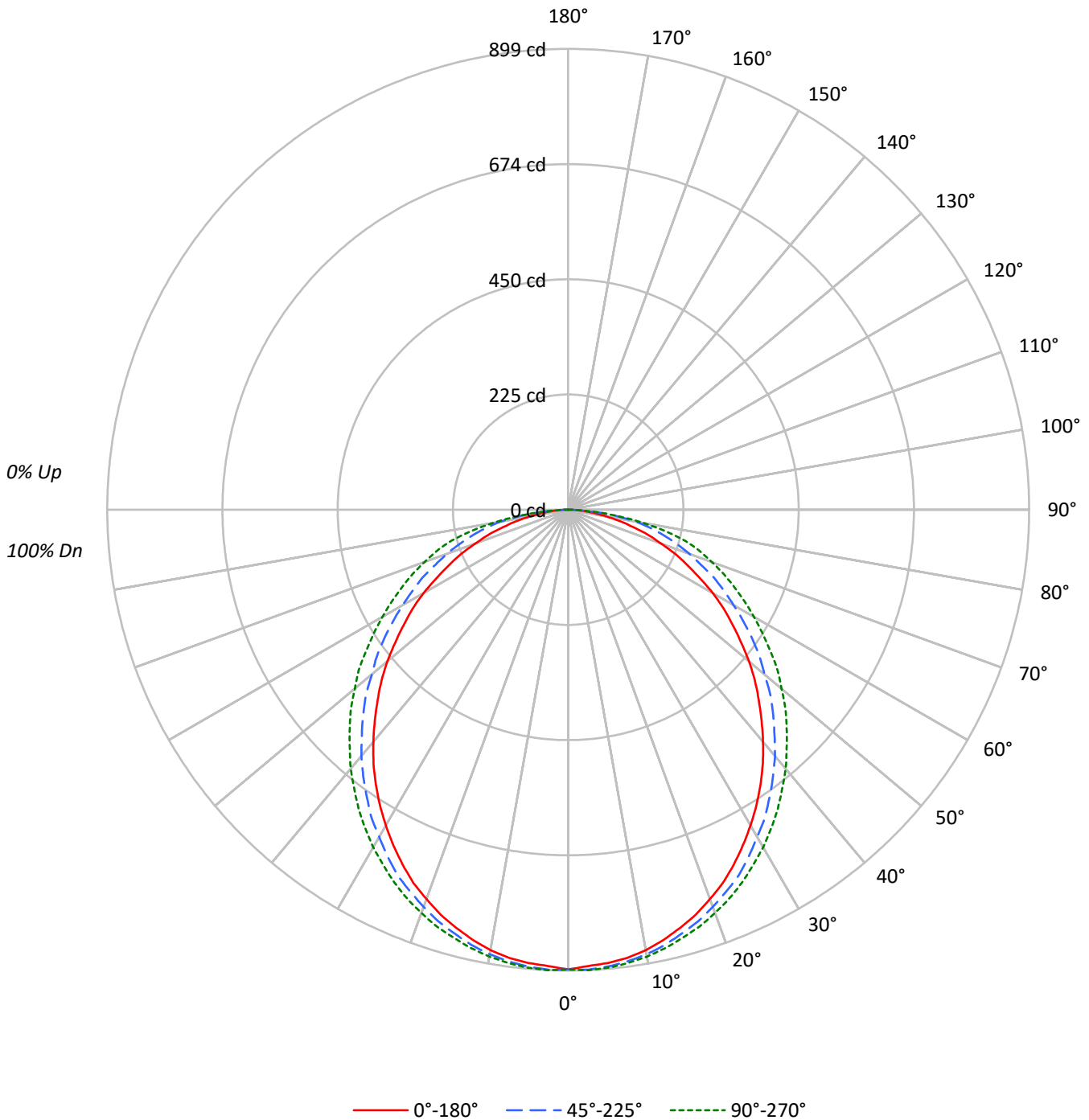
Input Watts (W): 18.321  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2414	2414	2414
5°	2398	2417	2423
10°	2384	2406	2419
15°	2352	2385	2408
20°	2314	2361	2398
25°	2268	2337	2382
30°	2210	2290	2362
35°	2148	2248	2340
40°	2076	2203	2318
45°	2000	2151	2293
50°	1926	2092	2273
55°	1835	2054	2258
60°	1753	2005	2250
65°	1636	1993	2276
70°	1507	1976	2343
75°	1360	2004	2465
80°	1176	2063	2317
85°	973	1732	1732



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.8	3.4
10°-20°	241.4	9.6
20°-30°	361.2	14.4
30°-40°	427.7	17.1
40°-50°	435.9	17.4
50°-60°	390.7	15.6
60°-70°	305.9	12.2
70°-80°	197.2	7.9
80°-90°	58.3	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°	687.4	27.5
0°-40°	1115.1	44.5
0°-60°	1941.6	77.6
0°-90°	2503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2503.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	888	890	895	896	897	84
15°	844	849	856	863	864	238
25°	764	771	787	798	802	352
35°	654	662	684	705	712	409
45°	526	537	565	594	603	406
55°	391	404	438	468	481	351
65°	257	272	313	343	357	255
75°	131	151	193	225	237	140
85°	32	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°	896.9	896.9	896.9	896.9	896.9
2.5°	891.1	893.4	898.1	899.2	899.2
5°	887.6	889.9	894.6	895.7	896.9
7.5°	881.7	882.9	888.7	891.1	892.2
10°	872.4	874.7	880.6	884.1	885.2
12.5°	859.5	863.0	870.0	874.7	875.9
15°	844.4	849.0	856.0	863.0	864.2
17.5°	828.0	832.7	842.0	850.2	852.5
20°	808.1	814.0	824.5	833.8	837.3
22.5°	788.3	793.0	805.8	817.5	821.0
25°	763.8	770.8	787.1	797.6	802.3
27.5°	738.1	746.3	762.6	776.6	781.3
30°	711.2	719.4	736.9	754.4	760.3
32.5°	683.2	692.5	713.6	731.1	736.9
35°	654.0	662.2	684.4	705.4	712.4
37.5°	623.6	630.6	656.3	678.5	685.5
40°	590.9	600.3	627.1	652.8	659.8
42.5°	558.2	568.7	595.6	623.6	630.6
45°	525.5	537.2	565.2	594.4	602.6
47.5°	494.0	503.3	534.9	562.9	574.6
50°	460.1	469.5	499.8	531.4	543.0
52.5°	425.1	437.9	470.6	501.0	515.0
55°	391.2	404.1	437.9	468.3	481.2
57.5°	359.7	370.2	405.2	436.8	449.6
60°	325.8	335.2	372.5	406.4	418.1
62.5°	289.6	303.6	342.2	373.7	387.7
65°	256.9	272.1	313.0	343.3	357.4
67.5°	226.6	240.6	280.3	313.0	328.2
70°	191.5	210.2	251.1	283.8	297.8
72.5°	163.5	179.8	221.9	254.6	269.8
75°	130.8	150.7	192.7	225.4	237.1
77.5°	103.9	123.8	163.5	189.2	195.0
80°	75.9	95.8	133.1	146.0	149.5
82.5°	51.4	70.1	95.8	99.3	100.4
85°	31.5	43.2	56.1	56.1	56.1
87.5°	15.2	17.5	19.9	18.7	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)