

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: P277444

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277444  
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-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1952.0 lumens  
Efficiency: N/A  
Efficacy: 112.2 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

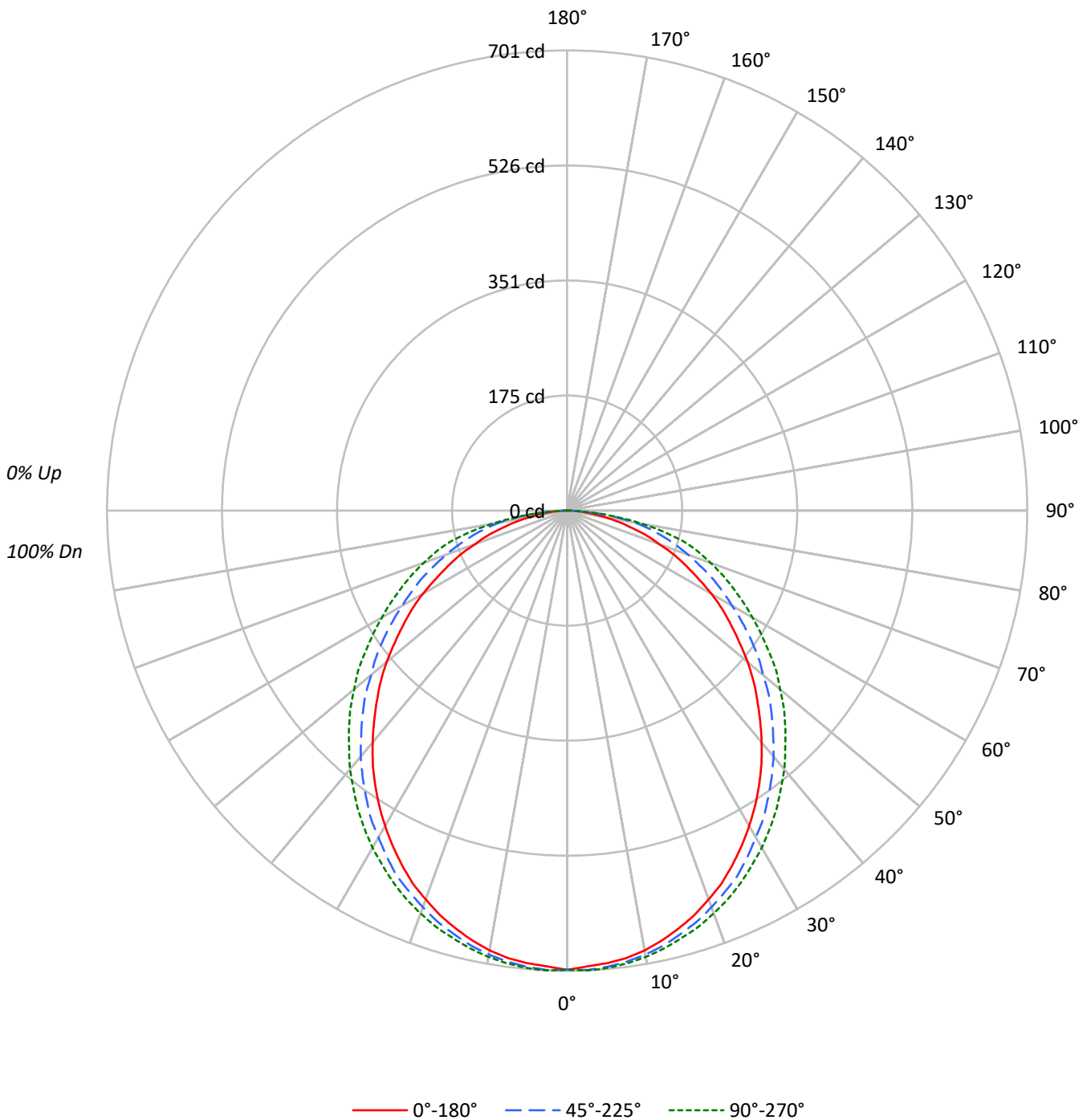
Input Watts (W): 17.391  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1882	1882	1882
5°	1870	1884	1890
10°	1859	1876	1887
15°	1835	1860	1878
20°	1805	1841	1870
25°	1768	1823	1858
30°	1724	1786	1842
35°	1675	1753	1825
40°	1619	1718	1808
45°	1560	1678	1789
50°	1502	1632	1773
55°	1431	1602	1760
60°	1368	1563	1755
65°	1276	1554	1775
70°	1175	1541	1827
75°	1061	1563	1922
80°	917	1609	1807
85°	760	1349	1349



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.1	3.4
10°-20°	188.2	9.6
20°-30°	281.7	14.4
30°-40°	333.6	17.1
40°-50°	339.9	17.4
50°-60°	304.7	15.6
60°-70°	238.5	12.2
70°-80°	153.8	7.9
80°-90°	45.4	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°	536.1	27.5
0°-40°	869.6	44.6
0°-60°	1514.2	77.6
0°-90°	1952.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1952.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	700	700	700	700	700	
5°	692	694	698	699	700	66
15°	658	662	668	673	674	186
25°	596	601	614	622	626	274
35°	510	516	534	550	556	319
45°	410	419	441	464	470	316
55°	305	315	342	365	375	274
65°	200	212	244	268	279	199
75°	102	118	150	176	185	109
85°	25	34	44	44	44	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	699.5	699.5	699.5	699.5	699.5
2.5°	694.9	696.7	700.4	701.3	701.3
5°	692.2	694.0	697.6	698.6	699.5
7.5°	687.6	688.5	693.1	694.9	695.8
10°	680.3	682.2	686.7	689.4	690.4
12.5°	670.3	673.1	678.5	682.2	683.1
15°	658.5	662.1	667.6	673.1	674.0
17.5°	645.7	649.4	656.7	663.0	664.9
20°	630.2	634.8	643.0	650.3	653.0
22.5°	614.8	618.4	628.4	637.5	640.3
25°	595.6	601.1	613.9	622.0	625.7
27.5°	575.6	582.0	594.7	605.7	609.3
30°	554.7	561.0	574.7	588.3	592.9
32.5°	532.8	540.1	556.5	570.1	574.7
35°	510.0	516.4	533.7	550.1	555.6
37.5°	486.3	491.8	511.8	529.2	534.6
40°	460.8	468.1	489.1	509.1	514.6
42.5°	435.3	443.5	464.5	486.3	491.8
45°	409.8	418.9	440.8	463.6	470.0
47.5°	385.3	392.5	417.1	439.0	448.1
50°	358.8	366.1	389.8	414.4	423.5
52.5°	331.5	341.5	367.0	390.7	401.6
55°	305.1	315.1	341.5	365.2	375.2
57.5°	280.5	288.7	316.0	340.6	350.6
60°	254.1	261.4	290.5	316.9	326.1
62.5°	225.9	236.8	266.9	291.4	302.4
65°	200.4	212.2	244.1	267.8	278.7
67.5°	176.7	187.6	218.6	244.1	255.9
70°	149.4	163.9	195.8	221.3	232.2
72.5°	127.5	140.3	173.0	198.5	210.4
75°	102.0	117.5	150.3	175.8	184.9
77.5°	81.1	96.5	127.5	147.5	152.1
80°	59.2	74.7	103.8	113.8	116.6
82.5°	40.1	54.6	74.7	77.4	78.3
85°	24.6	33.7	43.7	43.7	43.7
87.5°	11.8	13.7	15.5	14.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)