

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: P277448

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277448  
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-5000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2214.0 lumens  
Efficiency: N/A  
Efficacy: 123.3 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

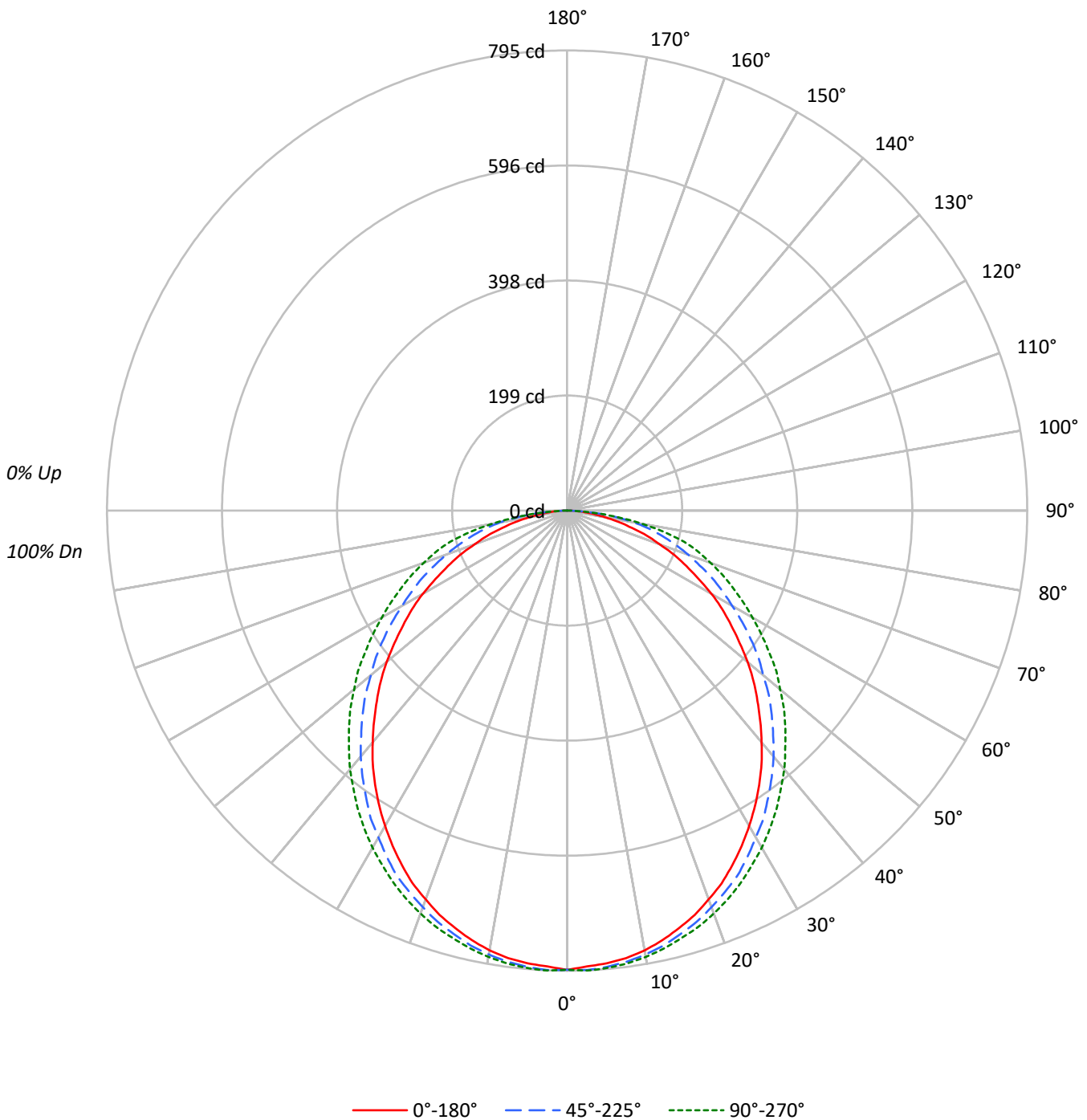
Input Watts (W): 17.949  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2135	2135	2135
5°	2121	2138	2143
10°	2109	2128	2140
15°	2081	2109	2130
20°	2047	2088	2121
25°	2006	2067	2107
30°	1955	2025	2090
35°	1900	1988	2070
40°	1836	1949	2050
45°	1769	1903	2028
50°	1704	1851	2011
55°	1624	1818	1997
60°	1551	1773	1990
65°	1447	1762	2013
70°	1333	1747	2072
75°	1203	1772	2180
80°	1040	1826	2049
85°	861	1531	1531



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.0	3.4
10°-20°	213.5	9.6
20°-30°	319.5	14.4
30°-40°	378.3	17.1
40°-50°	385.6	17.4
50°-60°	345.6	15.6
60°-70°	270.6	12.2
70°-80°	174.5	7.9
80°-90°	51.5	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°	608.0	27.5
0°-40°	986.3	44.5
0°-60°	1717.5	77.6
0°-90°	2214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2214.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	785	787	791	792	793	75
15°	747	751	757	763	764	211
25°	676	682	696	706	710	311
35°	578	586	605	624	630	362
45°	465	475	500	526	533	359
55°	346	357	387	414	426	310
65°	227	241	277	304	316	226
75°	116	133	170	199	210	124
85°	28	38	50	50	50	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	793.3	793.3	793.3	793.3	793.3
2.5°	788.2	790.2	794.4	795.4	795.4
5°	785.1	787.1	791.3	792.3	793.3
7.5°	779.9	780.9	786.1	788.2	789.2
10°	771.7	773.7	778.9	782.0	783.0
12.5°	760.3	763.4	769.6	773.7	774.8
15°	746.9	751.0	757.2	763.4	764.4
17.5°	732.4	736.5	744.8	752.0	754.1
20°	714.8	720.0	729.3	737.6	740.7
22.5°	697.3	701.4	712.8	723.1	726.2
25°	675.6	681.8	696.2	705.5	709.7
27.5°	652.9	660.1	674.6	686.9	691.1
30°	629.1	636.3	651.8	667.3	672.5
32.5°	604.3	612.6	631.2	646.7	651.8
35°	578.5	585.7	605.3	623.9	630.1
37.5°	551.6	557.8	580.5	600.2	606.4
40°	522.7	531.0	554.7	577.4	583.6
42.5°	493.8	503.1	526.8	551.6	557.8
45°	464.9	475.2	500.0	525.8	533.0
47.5°	437.0	445.2	473.1	497.9	508.2
50°	407.0	415.3	442.1	470.0	480.3
52.5°	376.0	387.4	416.3	443.2	455.6
55°	346.1	357.4	387.4	414.2	425.6
57.5°	318.2	327.5	358.5	386.3	397.7
60°	288.2	296.5	329.5	359.5	369.8
62.5°	256.2	268.6	302.7	330.6	343.0
65°	227.3	240.7	276.8	303.7	316.1
67.5°	200.4	212.8	247.9	276.8	290.3
70°	169.4	185.9	222.1	251.0	263.4
72.5°	144.6	159.1	196.3	225.2	238.6
75°	115.7	133.3	170.4	199.4	209.7
77.5°	91.9	109.5	144.6	167.3	172.5
80°	67.1	84.7	117.8	129.1	132.2
82.5°	45.5	62.0	84.7	87.8	88.8
85°	27.9	38.2	49.6	49.6	49.6
87.5°	13.4	15.5	17.6	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)