

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: P277449

Luminaire Tested: **22CZ2-24HE-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277449  
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-5500K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2249.0 lumens  
Efficiency: N/A  
Efficacy: 124.7 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

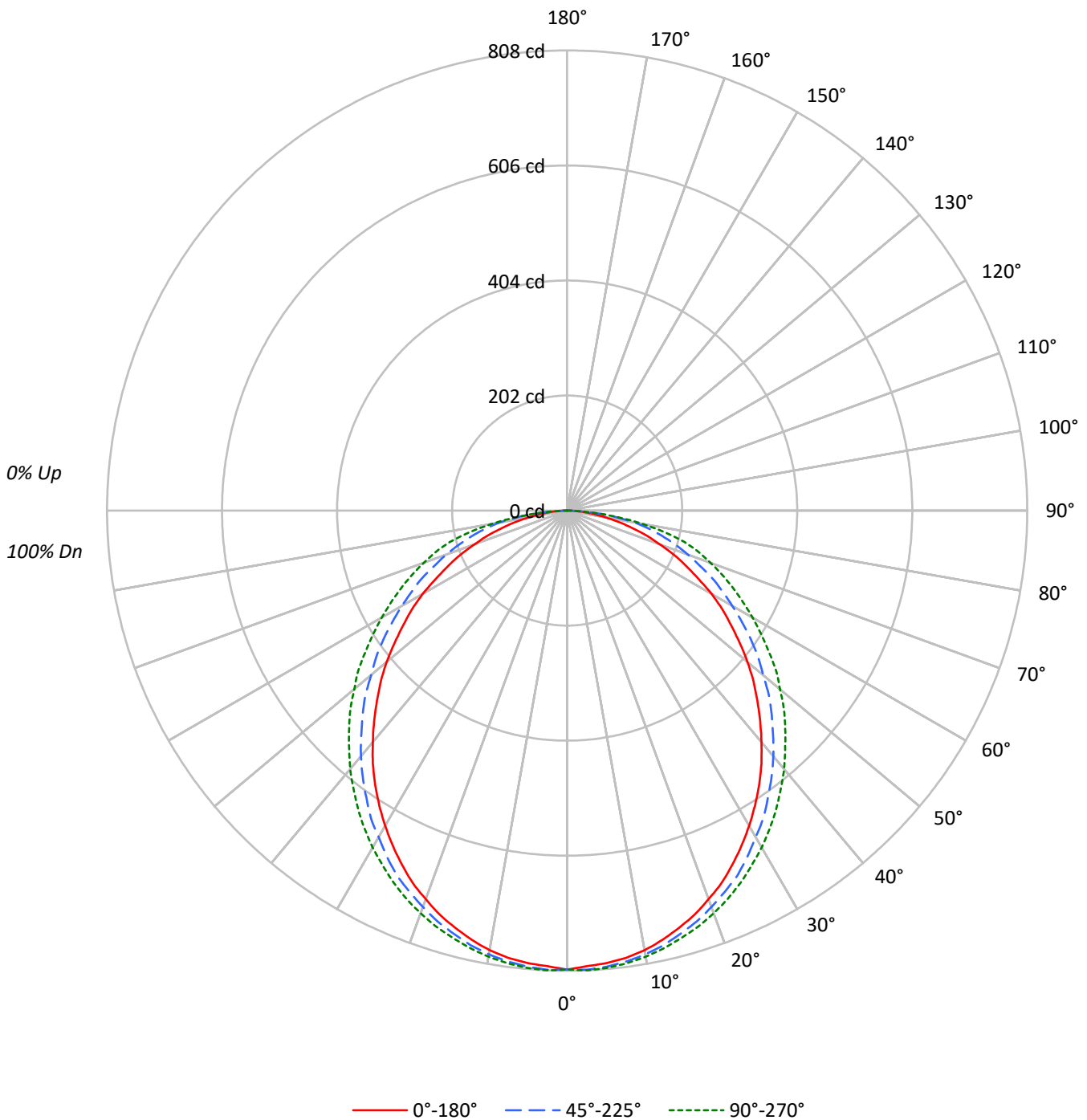
Input Watts (W): 18.042  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2169	2169	2169
5°	2154	2171	2177
10°	2142	2162	2173
15°	2114	2143	2163
20°	2079	2121	2155
25°	2038	2100	2140
30°	1986	2057	2123
35°	1930	2020	2103
40°	1865	1979	2083
45°	1797	1933	2061
50°	1731	1880	2043
55°	1649	1846	2028
60°	1576	1801	2022
65°	1470	1791	2045
70°	1354	1775	2105
75°	1222	1800	2215
80°	1057	1853	2081
85°	874	1556	1556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.2	3.4
10°-20°	216.9	9.6
20°-30°	324.5	14.4
30°-40°	384.3	17.1
40°-50°	391.7	17.4
50°-60°	351.0	15.6
60°-70°	274.8	12.2
70°-80°	177.2	7.9
80°-90°	52.3	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°	617.6	27.5
0°-40°	1001.9	44.5
0°-60°	1744.6	77.6
0°-90°	2249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	798	800	804	805	806	76
15°	759	763	769	776	776	214
25°	686	693	707	717	721	316
35°	588	595	615	634	640	367
45°	472	483	508	534	542	365
55°	352	363	394	421	432	315
65°	231	244	281	308	321	229
75°	118	135	173	202	213	126
85°	28	39	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°	805.9	805.9	805.9	805.9	805.9
2.5°	800.6	802.7	806.9	808.0	808.0
5°	797.5	799.6	803.8	804.8	805.9
7.5°	792.2	793.3	798.5	800.6	801.7
10°	783.9	785.9	791.2	794.3	795.4
12.5°	772.3	775.5	781.8	785.9	787.0
15°	758.7	762.9	769.2	775.5	776.5
17.5°	744.0	748.2	756.6	763.9	766.0
20°	726.1	731.4	740.8	749.2	752.4
22.5°	708.3	712.5	724.0	734.5	737.7
25°	686.3	692.6	707.2	716.7	720.9
27.5°	663.2	670.5	685.2	697.8	702.0
30°	639.0	646.4	662.1	677.9	683.1
32.5°	613.9	622.3	641.1	656.9	662.1
35°	587.6	595.0	614.9	633.8	640.1
37.5°	560.3	566.6	589.7	609.7	616.0
40°	531.0	539.4	563.5	586.6	592.9
42.5°	501.6	511.0	535.2	560.3	566.6
45°	472.2	482.7	507.9	534.1	541.5
47.5°	443.9	452.3	480.6	505.8	516.3
50°	413.4	421.8	449.1	477.4	487.9
52.5°	382.0	393.5	422.9	450.2	462.8
55°	351.5	363.1	393.5	420.8	432.3
57.5°	323.2	332.6	364.1	392.5	404.0
60°	292.8	301.2	334.7	365.2	375.7
62.5°	260.2	272.8	307.5	335.8	348.4
65°	230.9	244.5	281.2	308.5	321.1
67.5°	203.6	216.2	251.8	281.2	294.9
70°	172.1	188.9	225.6	255.0	267.6
72.5°	146.9	161.6	199.4	228.8	242.4
75°	117.5	135.4	173.1	202.5	213.0
77.5°	93.4	111.2	146.9	170.0	175.2
80°	68.2	86.0	119.6	131.2	134.3
82.5°	46.2	63.0	86.0	89.2	90.2
85°	28.3	38.8	50.4	50.4	50.4
87.5°	13.6	15.7	17.8	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)