

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: P277612

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277612  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24HE-RDP-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x2 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1239.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

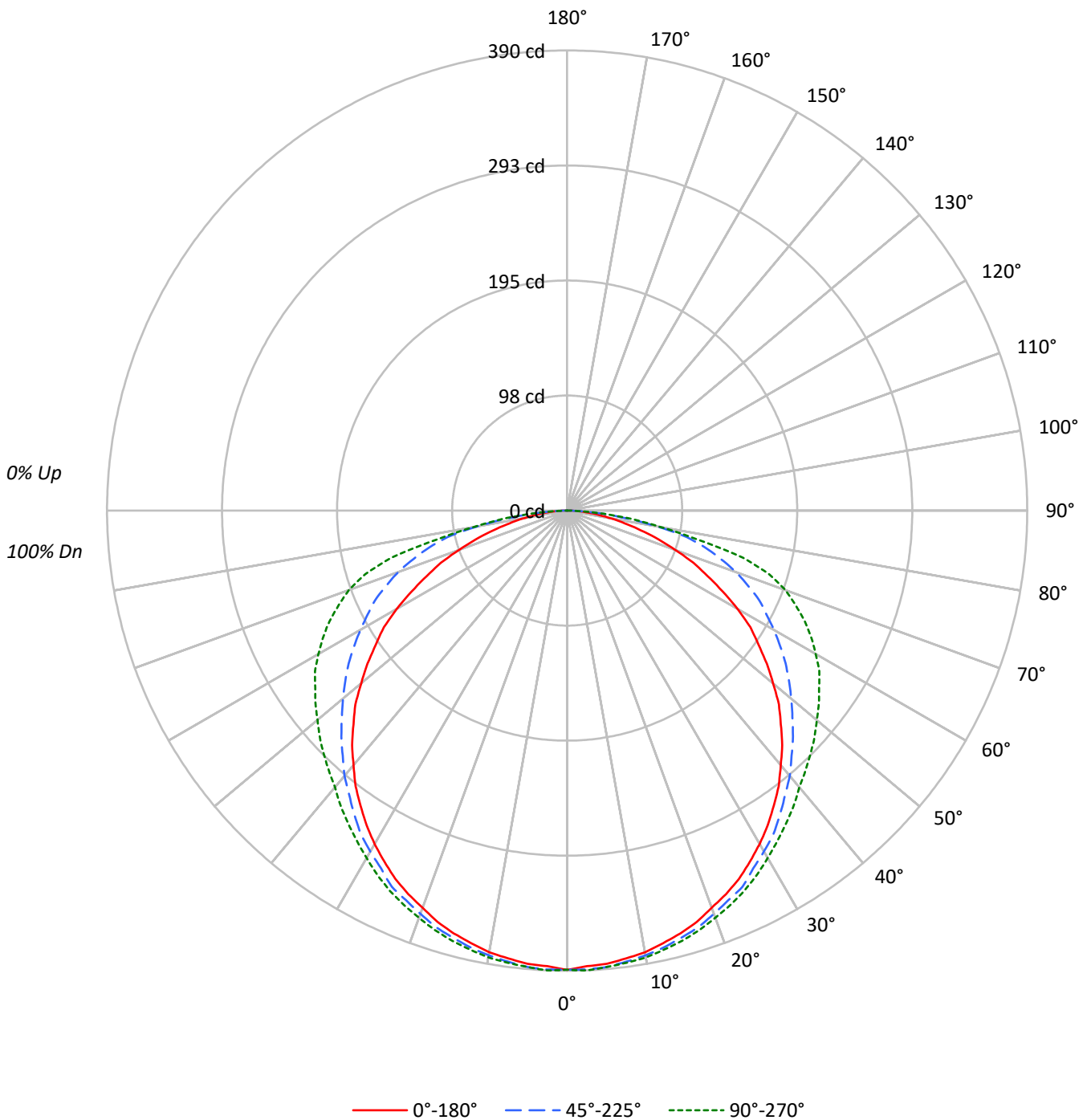
Input Watts (W): 17.391  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1047	1047	1047
5°	1041	1049	1049
10°	1039	1046	1051
15°	1034	1044	1051
20°	1026	1042	1052
25°	1023	1045	1056
30°	1014	1037	1056
35°	1003	1033	1063
40°	989	1031	1076
45°	975	1030	1110
50°	954	1038	1156
55°	928	1060	1223
60°	898	1089	1310
65°	835	1144	1416
70°	767	1197	1549
75°	673	1260	1601
80°	580	1201	1257
85°	506	874	957



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.8	3.0
10°-20°	105.7	8.5
20°-30°	161.3	13.0
30°-40°	196.9	15.9
40°-50°	210.5	17.0
50°-60°	203.2	16.4
60°-70°	174.9	14.1
70°-80°	118.4	9.6
80°-90°	31.2	2.5
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°	303.8	24.5
0°-40°	500.7	40.4
0°-60°	914.5	73.8
0°-90°	1239.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1239.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	389	389	389	389	389	
5°	386	386	388	388	388	37
15°	371	372	375	376	377	105
25°	344	346	352	354	356	159
35°	305	308	314	321	324	191
45°	256	261	271	284	292	198
55°	198	204	226	249	261	177
65°	131	144	180	208	222	131
75°	65	86	121	146	154	69
85°	16	23	28	29	31	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	389.2	389.2	389.2	389.2	389.2
2.5°	386.5	387.4	389.2	389.2	390.1
5°	385.5	386.5	388.3	388.3	388.3
7.5°	382.8	383.7	385.5	386.5	386.5
10°	380.1	381.0	382.8	383.7	384.6
12.5°	375.5	376.4	379.2	381.0	381.0
15°	371.0	371.9	374.6	376.4	377.3
17.5°	365.5	367.3	370.1	371.9	372.8
20°	358.2	360.0	363.7	366.4	367.3
22.5°	351.8	353.6	357.3	360.0	361.8
25°	344.5	346.4	351.8	353.6	355.5
27.5°	335.4	337.2	341.8	345.4	348.2
30°	326.3	328.1	333.6	338.1	340.0
32.5°	316.3	319.0	325.4	329.0	331.8
35°	305.3	308.1	314.5	320.8	323.6
37.5°	294.4	297.1	303.5	311.7	315.4
40°	281.6	285.3	293.5	304.4	306.2
42.5°	269.8	274.3	281.6	294.4	299.0
45°	256.1	260.7	270.7	284.4	291.7
47.5°	243.4	247.9	258.9	275.3	284.4
50°	227.9	234.2	247.9	267.1	276.2
52.5°	213.3	218.7	237.0	257.9	268.9
55°	197.8	204.2	226.0	248.8	260.7
57.5°	184.1	189.6	214.2	239.7	253.4
60°	166.8	174.1	202.3	229.7	243.4
62.5°	148.6	159.5	190.5	218.7	233.3
65°	131.2	144.0	179.6	207.8	222.4
67.5°	115.8	129.4	165.9	196.0	209.6
70°	97.5	114.8	152.2	181.4	196.9
72.5°	81.1	100.3	136.7	165.9	179.6
75°	64.7	85.7	121.2	145.8	154.0
77.5°	50.1	70.2	103.9	111.2	112.1
80°	37.4	55.6	77.5	78.4	81.1
82.5°	25.5	39.2	50.1	54.7	55.6
85°	16.4	22.8	28.3	29.2	31.0
87.5°	7.3	8.2	10.0	9.1	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)