

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: P276687

Luminaire Tested: **24CZ2-30-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276687  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30-S-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2362.7 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

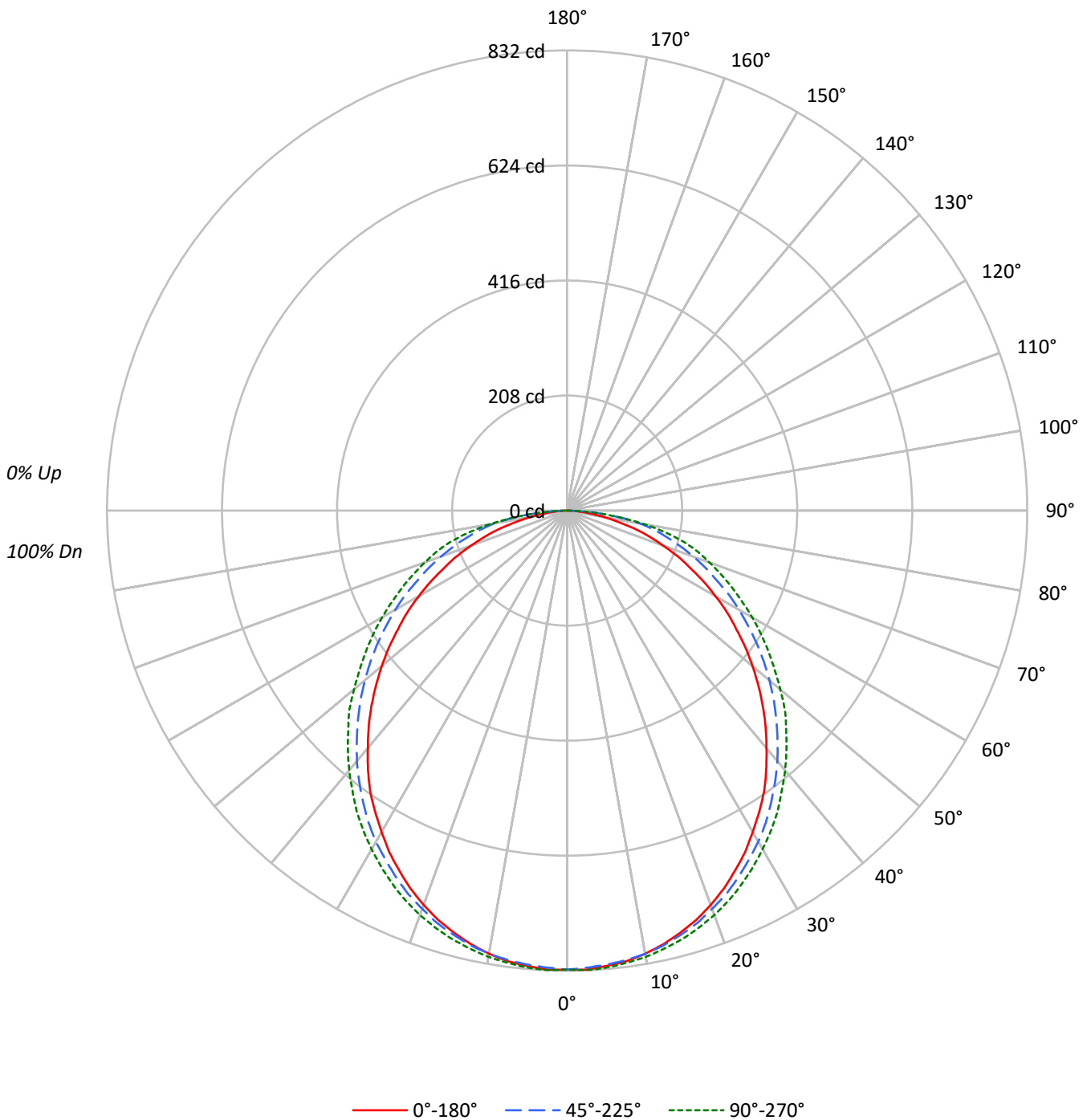
Input Watts (W): 21.669  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	1117	1117	1117
5°	1116	1113	1120
10°	1111	1111	1120
15°	1101	1106	1118
20°	1086	1097	1114
25°	1066	1086	1107
30°	1042	1074	1098
35°	1020	1056	1090
40°	985	1039	1077
45°	953	1018	1065
50°	916	999	1052
55°	875	981	1042
60°	834	965	1040
65°	781	948	1046
70°	723	954	1075
75°	648	972	1135
80°	523	1029	1110
85°	394	903	880



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.6	3.3
10°-20°	224.5	9.5
20°-30°	337.5	14.3
30°-40°	402.0	17.0
40°-50°	411.5	17.4
50°-60°	370.4	15.7
60°-70°	290.9	12.3
70°-80°	188.8	8.0
80°-90°	58.4	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°	640.6	27.1
0°-40°	1042.7	44.1
0°-60°	1824.6	77.2
0°-90°	2362.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2362.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	830	830	830	830	830	
5°	826	828	824	828	829	79
15°	790	792	794	801	802	223
25°	718	724	732	744	746	331
35°	621	628	643	659	663	387
45°	501	513	535	555	560	386
55°	373	390	418	440	444	334
65°	245	264	298	323	329	244
75°	125	149	187	212	218	132
85°	26	47	58	57	57	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	830.0	830.0	830.0	830.0	830.0
2.5°	830.8	830.8	827.0	830.8	831.5
5°	826.3	827.8	824.0	828.5	829.3
7.5°	821.8	821.8	819.5	824.0	824.8
10°	813.5	814.3	813.5	818.8	819.5
12.5°	803.0	804.5	805.3	810.5	811.3
15°	790.3	792.5	794.0	800.8	802.3
17.5°	776.0	778.3	782.0	789.5	791.0
20°	758.7	761.7	766.2	776.0	778.3
22.5°	740.0	743.0	750.5	759.5	763.2
25°	718.2	724.2	731.7	743.7	746.0
27.5°	696.5	701.7	711.5	724.2	727.2
30°	670.9	679.2	691.2	704.0	707.0
32.5°	646.2	654.4	668.7	682.2	685.9
35°	620.7	628.2	643.2	658.9	663.4
37.5°	591.4	601.1	617.7	633.4	637.9
40°	560.6	572.6	591.4	607.9	613.1
42.5°	531.3	544.1	562.9	580.9	586.9
45°	500.6	512.6	535.1	555.4	559.9
47.5°	469.1	482.6	506.6	526.8	534.3
50°	437.5	451.8	477.3	498.3	502.8
52.5°	406.0	421.0	448.0	470.6	472.8
55°	373.0	389.5	418.0	439.8	444.3
57.5°	343.0	357.2	388.0	410.5	415.8
60°	310.0	325.7	358.7	379.7	386.5
62.5°	278.4	294.9	329.5	350.5	356.5
65°	245.4	264.2	297.9	322.7	328.7
67.5°	216.9	234.9	270.9	294.9	300.9
70°	183.9	204.1	242.4	267.2	273.2
72.5°	155.4	176.4	214.6	238.7	247.7
75°	124.6	148.6	186.9	212.4	218.4
77.5°	94.6	122.3	161.4	180.9	180.9
80°	67.5	96.8	132.8	141.8	143.3
82.5°	44.3	72.8	98.3	97.6	97.6
85°	25.5	47.3	58.5	57.0	57.0
87.5°	9.8	19.5	21.0	21.0	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)