

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: P276695

Luminaire Tested: **24CZ2-30-S-UNV-L92765-W2A1-U-6500K**

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: P276695  
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-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2861.7 lumens  
Efficiency: N/A  
Efficacy: 125.6 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

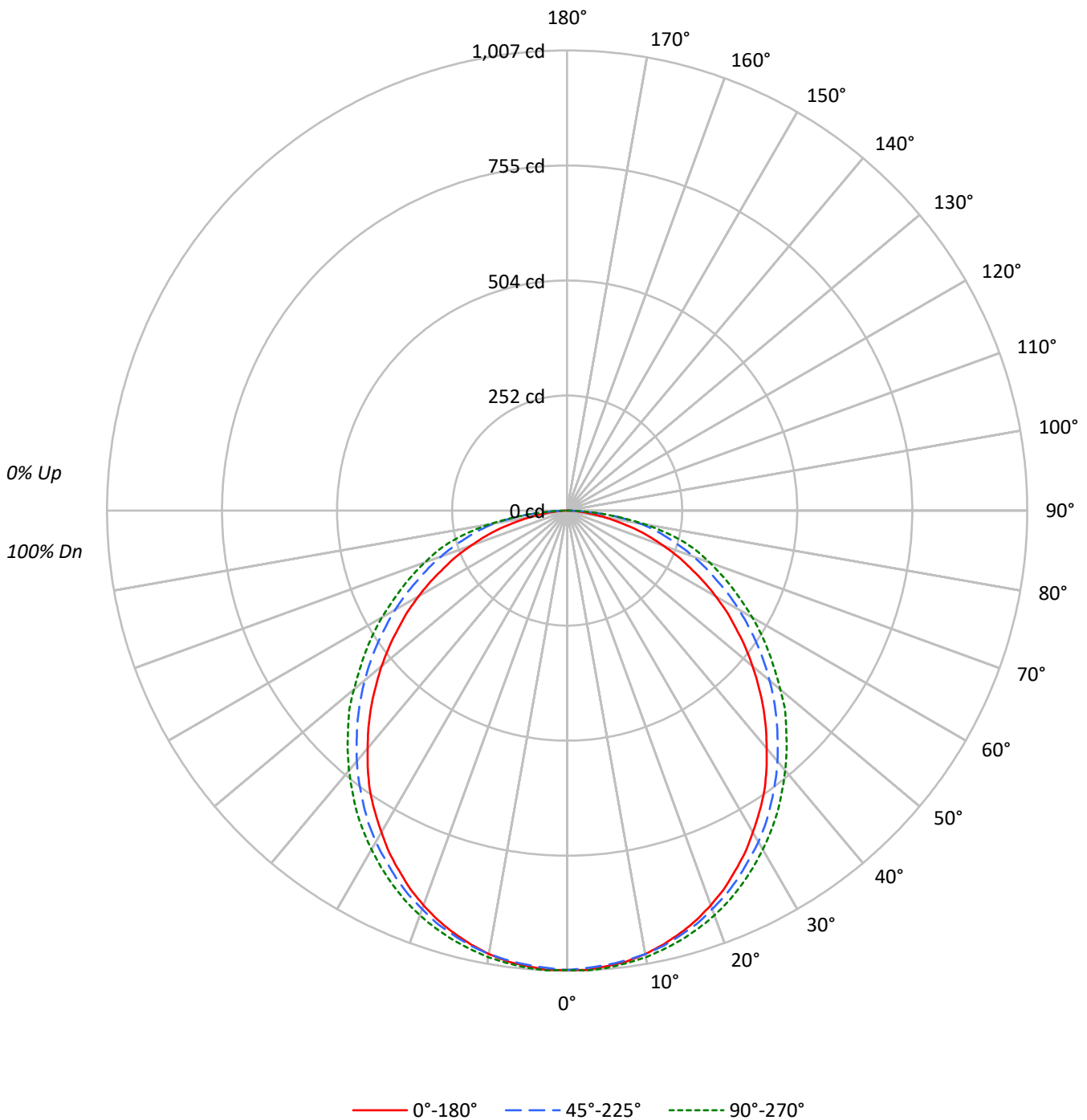
Input Watts (W): 22.785  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	1353	1353	1353
5°	1352	1348	1357
10°	1346	1346	1356
15°	1333	1340	1354
20°	1316	1329	1350
25°	1291	1316	1341
30°	1262	1301	1330
35°	1235	1280	1320
40°	1193	1258	1304
45°	1154	1233	1290
50°	1109	1210	1275
55°	1060	1188	1262
60°	1010	1169	1260
65°	946	1149	1267
70°	876	1155	1302
75°	784	1176	1375
80°	634	1247	1345
85°	477	1095	1067



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.2	3.3
10°-20°	272.0	9.5
20°-30°	408.8	14.3
30°-40°	487.0	17.0
40°-50°	498.4	17.4
50°-60°	448.7	15.7
60°-70°	352.4	12.3
70°-80°	228.7	8.0
80°-90°	70.7	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°	775.9	27.1
0°-40°	1262.9	44.1
0°-60°	2209.9	77.2
0°-90°	2861.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2861.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	1001	1003	998	1004	1004	95
15°	957	960	962	970	972	270
25°	870	877	886	901	904	401
35°	752	761	779	798	804	469
45°	606	621	648	673	678	467
55°	452	472	506	533	538	405
65°	297	320	361	391	398	296
75°	151	180	226	257	264	160
85°	31	57	71	69	69	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1005.3	1005.3	1005.3	1005.3	1005.3
2.5°	1006.2	1006.2	1001.7	1006.2	1007.2
5°	1000.8	1002.6	998.1	1003.5	1004.4
7.5°	995.3	995.3	992.6	998.1	999.0
10°	985.3	986.2	985.3	991.7	992.6
12.5°	972.6	974.4	975.3	981.7	982.6
15°	957.2	959.9	961.7	969.9	971.7
17.5°	939.9	942.6	947.2	956.3	958.1
20°	919.0	922.6	928.1	939.9	942.6
22.5°	896.3	899.9	909.0	919.9	924.4
25°	869.9	877.2	886.3	900.8	903.5
27.5°	843.5	849.9	861.7	877.2	880.8
30°	812.6	822.6	837.2	852.6	856.3
32.5°	782.6	792.6	809.9	826.3	830.8
35°	751.7	760.8	779.0	798.1	803.5
37.5°	716.3	728.1	748.1	767.2	772.6
40°	679.0	693.6	716.3	736.3	742.6
42.5°	643.6	659.0	681.7	703.6	710.8
45°	606.3	620.8	648.1	672.6	678.1
47.5°	568.1	584.5	613.6	638.1	647.2
50°	529.9	547.2	578.1	603.6	609.0
52.5°	491.8	509.9	542.7	569.9	572.7
55°	451.8	471.8	506.3	532.7	538.1
57.5°	415.4	432.7	469.9	497.2	503.6
60°	375.4	394.5	434.5	459.9	468.1
62.5°	337.2	357.2	399.0	424.5	431.8
65°	297.2	320.0	360.9	390.9	398.1
67.5°	262.7	284.5	328.1	357.2	364.5
70°	222.7	247.2	293.6	323.6	330.9
72.5°	188.2	213.6	260.0	289.1	300.0
75°	150.9	180.0	226.3	257.2	264.5
77.5°	114.5	148.2	195.4	219.1	219.1
80°	81.8	117.3	160.9	171.8	173.6
82.5°	53.6	88.2	119.1	118.2	118.2
85°	30.9	57.3	70.9	69.1	69.1
87.5°	11.8	23.6	25.5	25.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)