

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: P276689

Luminaire Tested: **24CZ2-30-S-UNV-L92765-W2A1-U-3500K**

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: P276689
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-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2579.4 lumens
Efficiency: N/A
Efficacy: 118.0 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

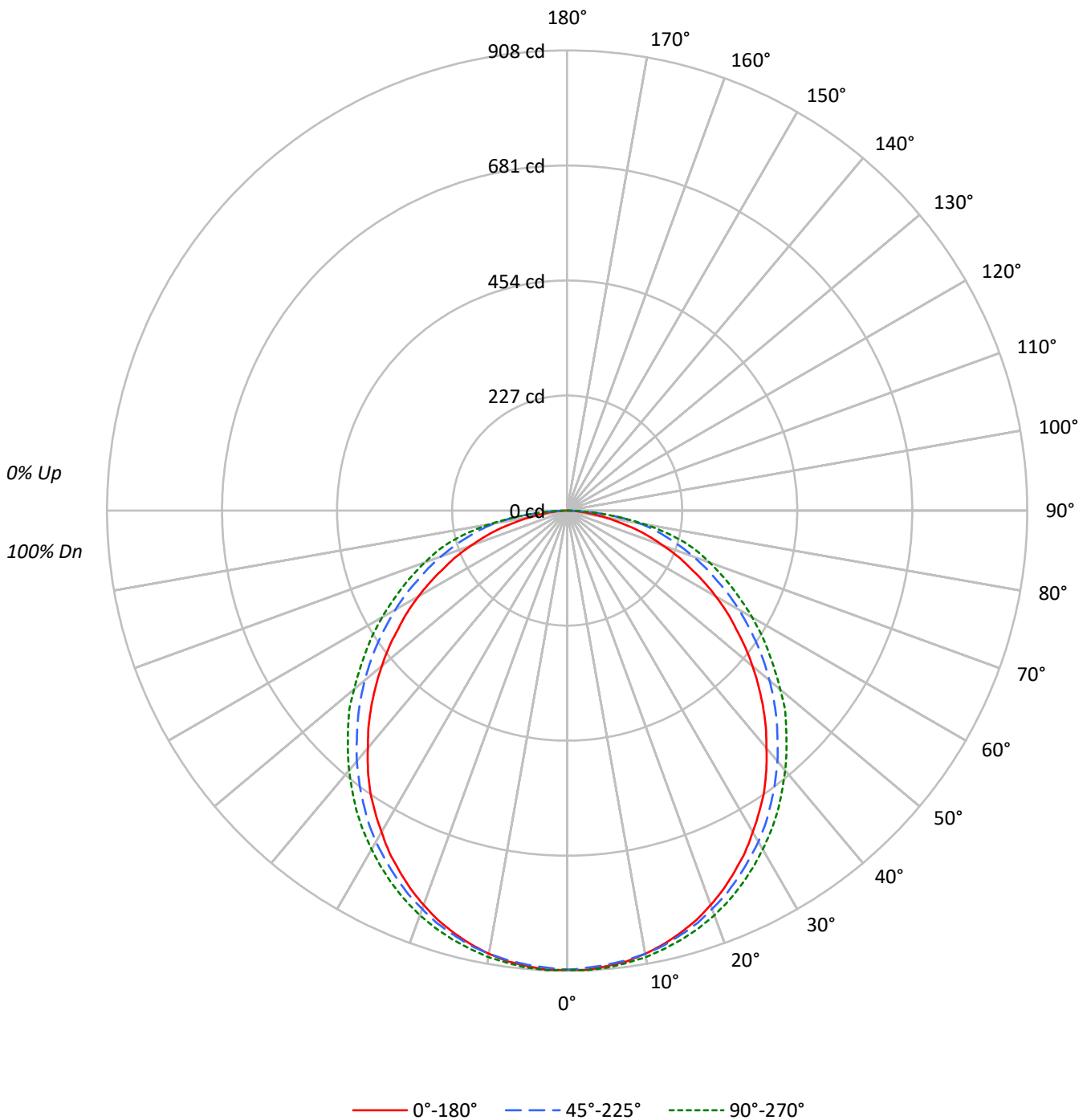
Input Watts (W): 21.855
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276689

CATALOG NUMBER: 24CZ2-30-S-UNV-L92765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P276689

CATALOG NUMBER: 24CZ2-30-S-UNV-L92765-W2A1-U-3500K

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°	1219	1219	1219
5°	1218	1215	1223
10°	1213	1213	1222
15°	1202	1207	1220
20°	1186	1198	1216
25°	1164	1186	1209
30°	1138	1172	1199
35°	1113	1153	1190
40°	1075	1134	1176
45°	1040	1112	1163
50°	1000	1091	1149
55°	955	1071	1138
60°	911	1054	1135
65°	853	1036	1143
70°	790	1041	1173
75°	707	1061	1239
80°	571	1124	1213
85°	431	986	962



TEST NUMBER: P276689

CATALOG NUMBER: 24CZ2-30-S-UNV-L92765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	3.3
10°-20°	245.1	9.5
20°-30°	368.5	14.3
30°-40°	438.9	17.0
40°-50°	449.2	17.4
50°-60°	404.4	15.7
60°-70°	317.6	12.3
70°-80°	206.1	8.0
80°-90°	63.7	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°	699.4	27.1
0°-40°	1138.3	44.1
0°-60°	1991.9	77.2
0°-90°	2579.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2579.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	902	904	900	904	905	86
15°	863	865	867	874	876	243
25°	784	791	799	812	814	361
35°	678	686	702	719	724	423
45°	546	560	584	606	611	421
55°	407	425	456	480	485	365
65°	268	288	325	352	359	267
75°	136	162	204	232	238	144
85°	28	52	64	62	62	34
90°	0	0	0	0	0	



TEST NUMBER: P276689

CATALOG NUMBER: 24CZ2-30-S-UNV-L92765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	906.2	906.2	906.2	906.2	906.2
2.5°	907.0	907.0	902.9	907.0	907.8
5°	902.1	903.7	899.6	904.5	905.3
7.5°	897.2	897.2	894.7	899.6	900.4
10°	888.1	889.0	888.1	893.9	894.7
12.5°	876.7	878.3	879.1	884.9	885.7
15°	862.7	865.2	866.8	874.2	875.9
17.5°	847.2	849.6	853.7	861.9	863.6
20°	828.3	831.6	836.5	847.2	849.6
22.5°	807.8	811.1	819.3	829.1	833.2
25°	784.1	790.6	798.8	811.9	814.4
27.5°	760.3	766.1	776.7	790.6	793.9
30°	732.5	741.5	754.6	768.5	771.8
32.5°	705.4	714.4	730.0	744.8	748.9
35°	677.6	685.8	702.2	719.4	724.3
37.5°	645.6	656.3	674.3	691.5	696.4
40°	612.0	625.1	645.6	663.6	669.4
42.5°	580.1	594.0	614.5	634.2	640.7
45°	546.5	559.6	584.2	606.3	611.2
47.5°	512.1	526.8	553.0	575.2	583.4
50°	477.7	493.2	521.1	544.0	548.9
52.5°	443.3	459.6	489.1	513.7	516.2
55°	407.2	425.2	456.4	480.1	485.0
57.5°	374.4	390.0	423.6	448.2	453.9
60°	338.4	355.6	391.6	414.6	421.9
62.5°	304.0	322.0	359.7	382.6	389.2
65°	267.9	288.4	325.3	352.3	358.9
67.5°	236.8	256.4	295.8	322.0	328.5
70°	200.7	222.9	264.6	291.7	298.2
72.5°	169.6	192.5	234.3	260.5	270.4
75°	136.0	162.2	204.0	231.9	238.4
77.5°	103.2	133.5	176.2	197.5	197.5
80°	73.7	105.7	145.0	154.9	156.5
82.5°	48.3	79.5	107.3	106.5	106.5
85°	27.9	51.6	63.9	62.3	62.3
87.5°	10.7	21.3	22.9	22.9	22.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)