

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: P275719

Luminaire Tested: **14CZ2-44-S-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275719  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-S-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3937.0 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

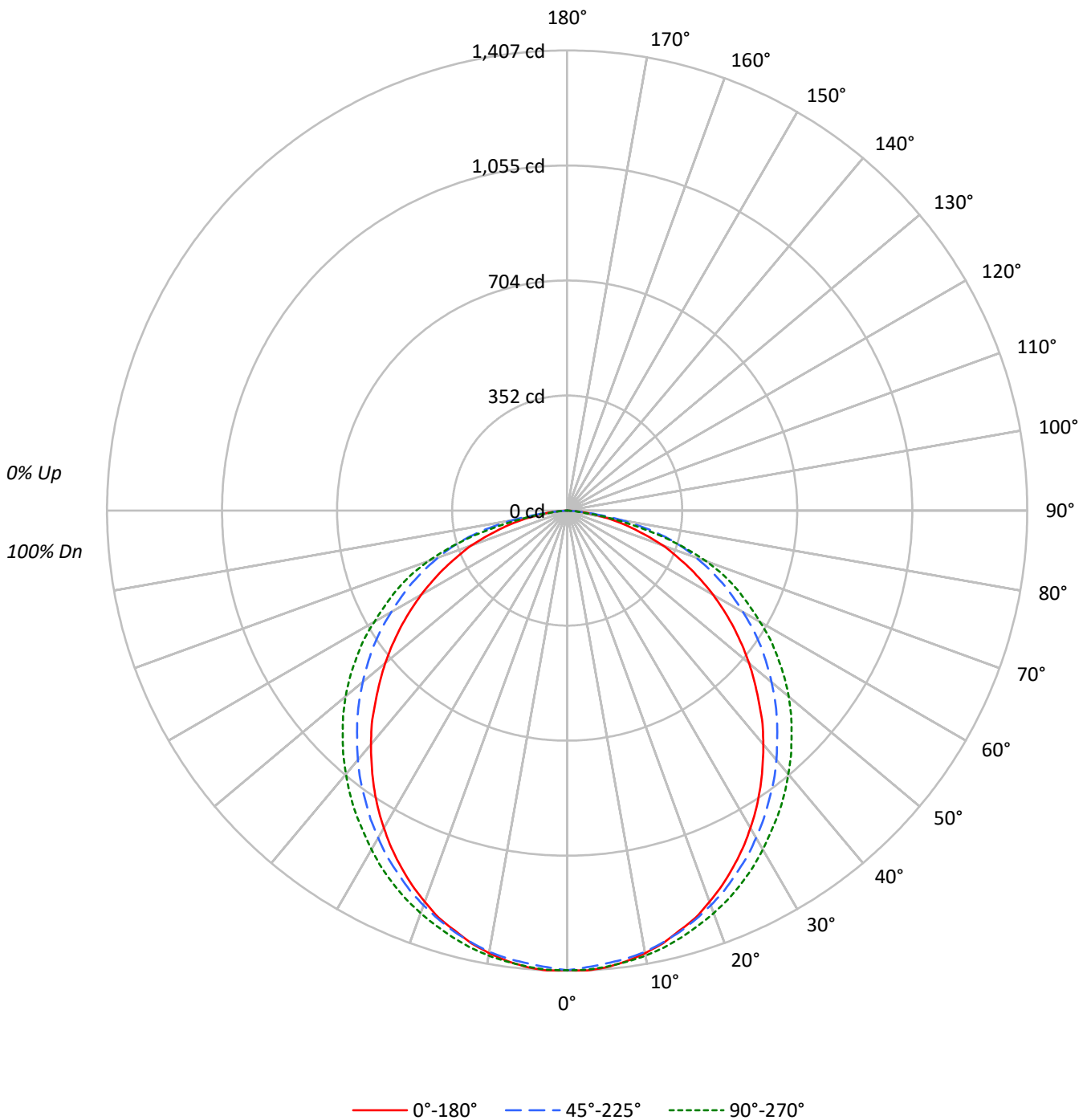
Input Watts (W): 36.27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P275719

CATALOG NUMBER: 14CZ2-44-S-UNV-L92765-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P275719

CATALOG NUMBER: 14CZ2-44-S-UNV-L92765-W2A1-U-4500K

**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	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	3782	3782	3782
5°	3786	3754	3781
10°	3755	3744	3776
15°	3703	3714	3763
20°	3645	3678	3751
25°	3570	3634	3738
30°	3482	3591	3718
35°	3386	3540	3707
40°	3278	3497	3696
45°	3157	3454	3692
50°	3040	3416	3702
55°	2912	3388	3691
60°	2773	3341	3666
65°	2610	3331	3666
70°	2457	3302	3563
75°	2131	3227	3044
80°	1725	2602	2027
85°	1145	905	602



TEST NUMBER: P275719

CATALOG NUMBER: 14CZ2-44-S-UNV-L92765-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.7	3.4
10°-20°	377.6	9.6
20°-30°	566.5	14.4
30°-40°	675.8	17.2
40°-50°	698.6	17.7
50°-60°	637.8	16.2
60°-70°	501.9	12.7
70°-80°	292.2	7.4
80°-90°	53.8	1.4
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°	1076.8	27.4
0°-40°	1752.6	44.5
0°-60°	3089.0	78.5
0°-90°	3937.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3937.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1402	1398	1390	1402	1400	133
15°	1329	1331	1333	1351	1351	375
25°	1202	1208	1224	1253	1259	554
35°	1031	1044	1078	1118	1128	644
45°	830	857	908	958	970	641
55°	621	654	722	775	787	555
65°	410	453	523	564	576	407
75°	205	254	310	304	293	218
85°	37	53	29	23	20	48
90°	0	0	0	0	0	



TEST NUMBER: P275719

CATALOG NUMBER: 14CZ2-44-S-UNV-L92765-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1405.4	1405.4	1405.4	1405.4	1405.4
2.5°	1407.4	1403.5	1397.6	1407.4	1405.4
5°	1401.5	1397.6	1389.8	1401.5	1399.6
7.5°	1389.8	1385.9	1382.0	1393.7	1391.8
10°	1374.2	1372.3	1370.3	1384.0	1382.0
12.5°	1354.7	1354.7	1352.7	1368.4	1368.4
15°	1329.3	1331.3	1333.2	1350.8	1350.8
17.5°	1305.9	1303.9	1309.8	1329.3	1331.3
20°	1272.7	1276.6	1284.4	1307.8	1309.8
22.5°	1239.5	1243.4	1257.1	1280.5	1286.4
25°	1202.4	1208.3	1223.9	1253.2	1259.0
27.5°	1163.4	1171.2	1192.7	1223.9	1229.8
30°	1120.5	1132.2	1155.6	1190.7	1196.6
32.5°	1077.5	1089.2	1118.5	1153.6	1161.4
35°	1030.7	1044.3	1077.5	1118.5	1128.3
37.5°	981.9	999.4	1038.5	1079.5	1091.2
40°	933.1	952.6	995.5	1038.5	1052.1
42.5°	884.3	903.8	950.6	999.4	1013.1
45°	829.6	856.9	907.7	958.4	970.1
47.5°	776.9	806.2	862.8	913.5	929.2
50°	726.1	755.4	815.9	868.6	884.3
52.5°	673.4	704.7	769.1	823.7	837.4
55°	620.7	653.9	722.2	774.9	786.7
57.5°	568.0	603.2	673.4	724.2	737.9
60°	515.3	552.4	620.7	671.5	681.2
62.5°	462.6	501.7	571.9	616.8	626.6
65°	409.9	452.9	523.1	564.1	575.8
67.5°	359.2	402.1	470.4	509.5	519.2
70°	312.3	351.4	419.7	449.0	452.9
72.5°	253.8	302.6	368.9	384.5	374.8
75°	205.0	253.8	310.4	304.5	292.8
77.5°	156.2	205.0	242.0	222.5	206.9
80°	111.3	160.1	167.9	138.6	130.8
82.5°	72.2	111.3	93.7	72.2	58.6
85°	37.1	52.7	29.3	23.4	19.5
87.5°	11.7	7.8	3.9	3.9	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)