

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: P276918

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50HE-RDP-UNV-L82765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2934.4 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

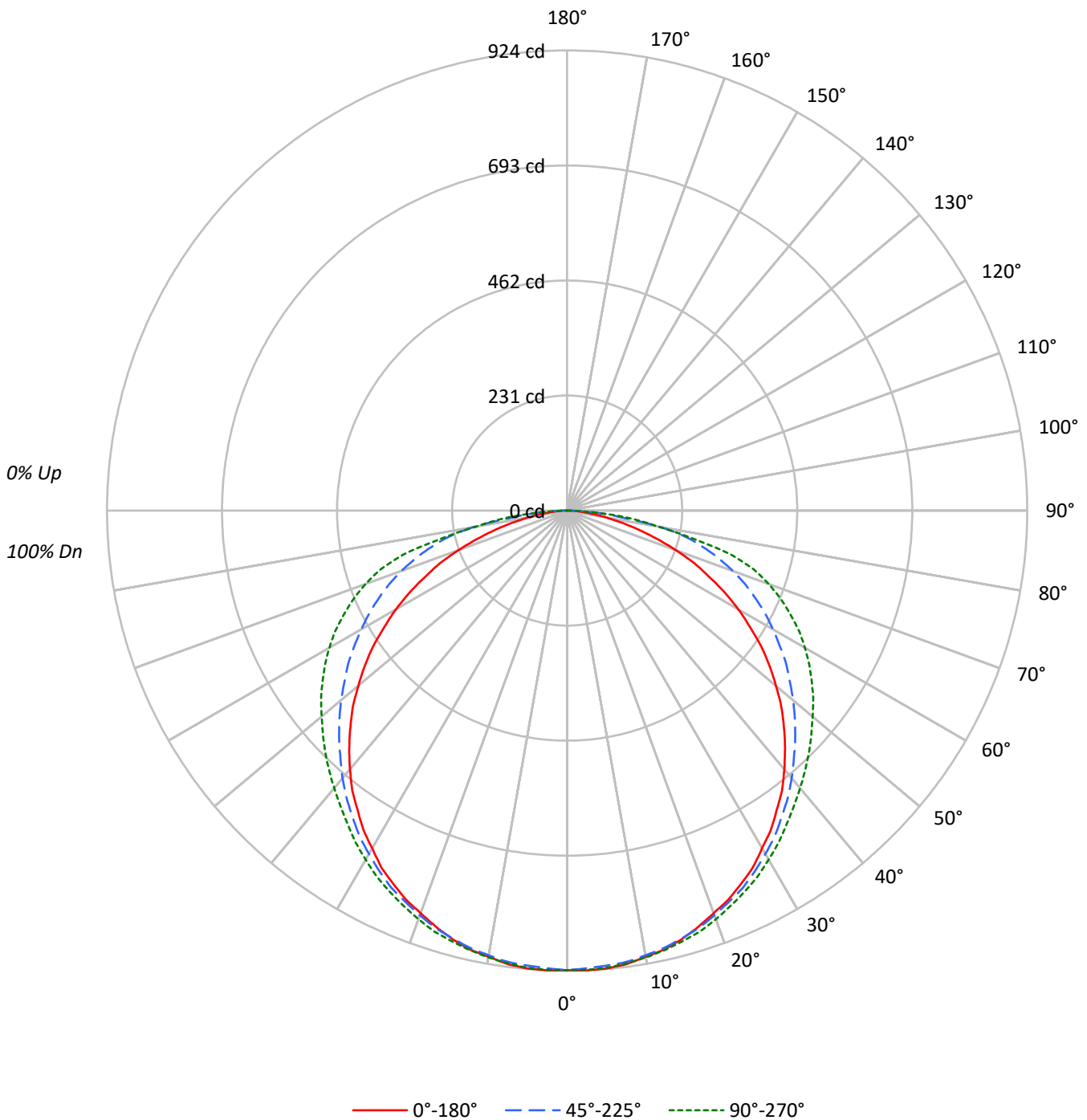
Input Watts (W): 35.712  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	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°	1242	1242	1242
5°	1246	1239	1244
10°	1243	1239	1245
15°	1241	1239	1247
20°	1232	1238	1250
25°	1227	1240	1253
30°	1216	1237	1257
35°	1205	1234	1262
40°	1191	1232	1278
45°	1172	1232	1307
50°	1146	1240	1347
55°	1116	1260	1407
60°	1069	1285	1484
65°	1001	1330	1576
70°	910	1391	1695
75°	772	1468	1771
80°	609	1478	1432
85°	449	1124	1258



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.5	3.0
10°-20°	251.9	8.6
20°-30°	385.2	13.1
30°-40°	470.9	16.0
40°-50°	501.9	17.1
50°-60°	479.9	16.4
60°-70°	406.6	13.9
70°-80°	273.2	9.3
80°-90°	77.1	2.6
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°	724.7	24.7
0°-40°	1195.6	40.7
0°-60°	2177.5	74.2
0°-90°	2934.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2934.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	923	923	923	923	923	
5°	923	921	917	921	921	88
15°	891	891	889	897	895	251
25°	827	830	835	843	844	381
35°	734	739	751	766	768	460
45°	616	626	648	675	687	475
55°	476	493	537	579	600	424
65°	314	346	418	473	495	312
75°	148	202	282	330	341	159
85°	29	60	73	79	82	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	922.8	922.8	922.8	922.8	922.8
2.5°	924.2	924.2	919.9	922.8	922.8
5°	922.8	921.3	917.0	921.3	921.3
7.5°	918.4	917.0	914.0	918.4	917.0
10°	909.7	909.7	906.8	911.1	911.1
12.5°	902.4	900.9	899.5	905.3	903.9
15°	890.8	890.8	889.3	896.6	895.1
17.5°	876.2	877.7	879.1	884.9	886.4
20°	860.2	863.1	864.6	873.3	873.3
22.5°	845.6	847.1	850.0	858.7	858.7
25°	826.7	829.6	835.4	842.7	844.2
27.5°	807.8	809.2	816.5	826.7	828.2
30°	783.0	787.4	796.1	807.8	809.2
32.5°	761.2	765.6	775.8	787.4	790.3
35°	733.6	739.4	751.0	765.6	768.5
37.5°	708.8	713.2	727.7	743.7	748.1
40°	678.3	687.0	701.5	720.5	727.7
42.5°	647.7	656.4	673.9	698.6	707.4
45°	615.7	625.9	647.7	675.3	687.0
47.5°	583.6	595.3	620.0	652.1	665.2
50°	547.3	561.8	592.4	628.8	643.3
52.5°	512.3	529.8	563.3	604.0	622.9
55°	475.9	493.4	537.1	579.3	599.7
57.5°	435.2	458.5	506.5	554.5	576.4
60°	397.3	419.2	477.4	529.8	551.6
62.5°	356.6	385.7	448.3	503.6	525.4
65°	314.4	346.4	417.7	473.0	494.9
67.5°	276.5	311.5	387.2	442.5	464.3
70°	231.4	275.1	353.7	409.0	430.8
72.5°	189.2	237.2	318.7	372.6	393.0
75°	148.5	202.3	282.4	330.4	340.6
77.5°	110.6	167.4	244.5	264.9	257.6
80°	78.6	133.9	190.7	180.5	184.8
82.5°	50.9	101.9	117.9	133.9	138.3
85°	29.1	59.7	72.8	78.6	81.5
87.5°	13.1	21.8	29.1	29.1	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)