

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: P277056

Luminaire Tested: **24CZ2-50HE-RDP-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P277056  
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-L92765-W2A1-U-4000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2824.3 lumens  
Efficiency: N/A  
Efficacy: 78.3 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

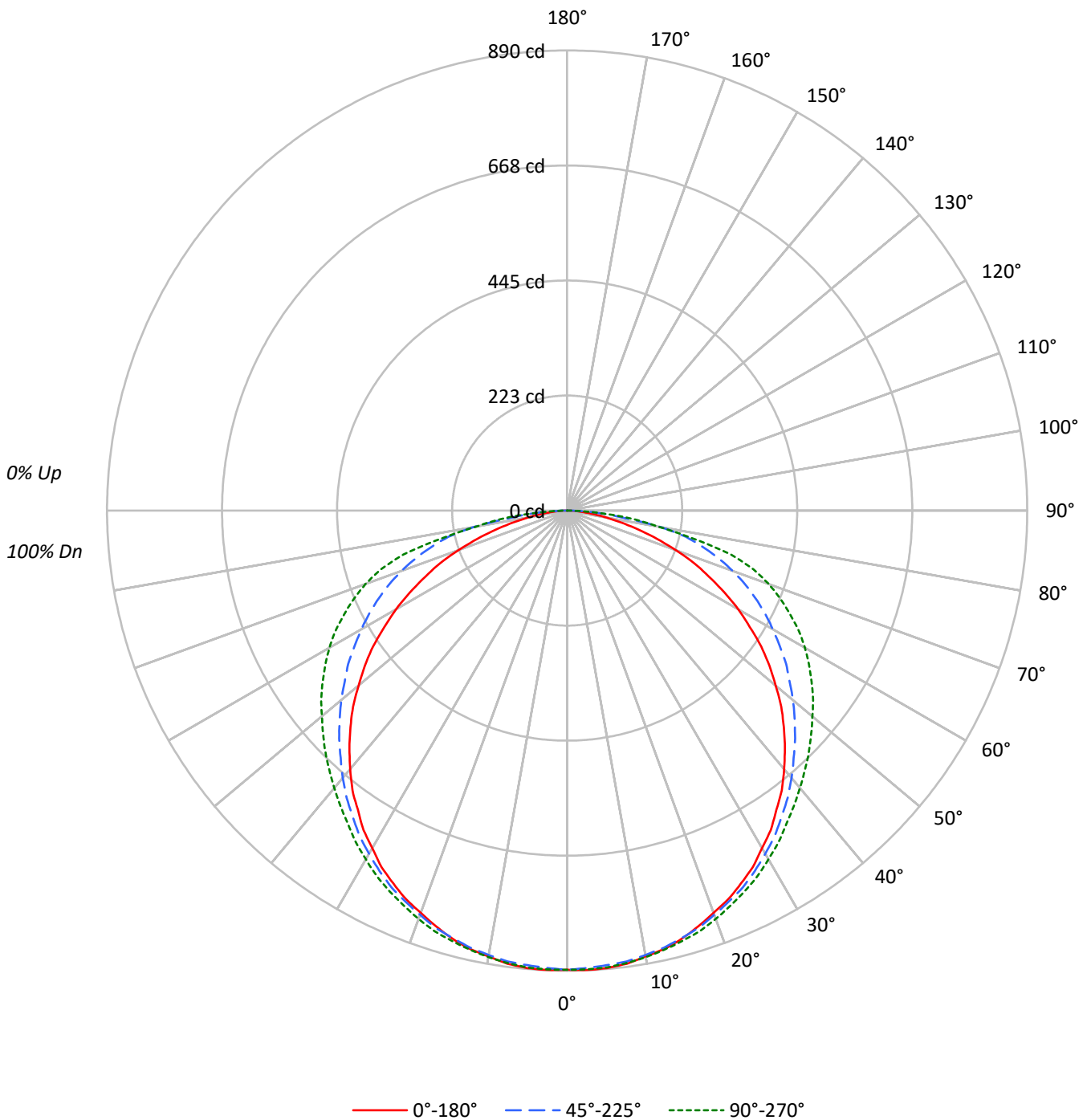
Input Watts (W): 36.084  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	68	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°	1195	1195	1195
5°	1200	1192	1198
10°	1196	1192	1198
15°	1194	1192	1200
20°	1185	1191	1203
25°	1181	1194	1206
30°	1171	1191	1210
35°	1160	1187	1215
40°	1147	1186	1230
45°	1128	1186	1258
50°	1102	1194	1296
55°	1075	1213	1354
60°	1029	1237	1429
65°	963	1280	1516
70°	876	1339	1631
75°	743	1413	1704
80°	586	1422	1378
85°	432	1081	1210



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.3	3.0
10°-20°	242.5	8.6
20°-30°	370.8	13.1
30°-40°	453.3	16.0
40°-50°	483.1	17.1
50°-60°	461.9	16.4
60°-70°	391.3	13.9
70°-80°	263.0	9.3
80°-90°	74.2	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°	697.5	24.7
0°-40°	1150.8	40.7
0°-60°	2095.8	74.2
0°-90°	2824.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2824.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	888	887	883	887	887	84
15°	857	857	856	863	862	242
25°	796	798	804	811	812	367
35°	706	712	723	737	740	442
45°	593	602	623	650	661	457
55°	458	475	517	558	577	408
65°	303	333	402	455	476	300
75°	143	195	272	318	328	153
85°	28	57	70	76	78	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	888.2	888.2	888.2	888.2	888.2
2.5°	889.6	889.6	885.4	888.2	888.2
5°	888.2	886.8	882.6	886.8	886.8
7.5°	884.0	882.6	879.8	884.0	882.6
10°	875.6	875.6	872.7	877.0	877.0
12.5°	868.5	867.1	865.7	871.3	869.9
15°	857.3	857.3	855.9	862.9	861.5
17.5°	843.3	844.7	846.1	851.7	853.1
20°	827.9	830.7	832.1	840.5	840.5
22.5°	813.9	815.3	818.1	826.5	826.5
25°	795.7	798.5	804.1	811.1	812.5
27.5°	777.5	778.9	785.9	795.7	797.1
30°	753.7	757.9	766.3	777.5	778.9
32.5°	732.7	736.9	746.7	757.9	760.7
35°	706.0	711.6	722.9	736.9	739.7
37.5°	682.2	686.4	700.4	715.9	720.1
40°	652.8	661.2	675.2	693.4	700.4
42.5°	623.4	631.8	648.6	672.4	680.8
45°	592.6	602.4	623.4	650.0	661.2
47.5°	561.8	573.0	596.8	627.6	640.2
50°	526.7	540.7	570.2	605.2	619.2
52.5°	493.1	509.9	542.1	581.4	599.6
55°	458.1	474.9	516.9	557.6	577.2
57.5°	418.9	441.3	487.5	533.7	554.7
60°	382.4	403.5	459.5	509.9	530.9
62.5°	343.2	371.2	431.5	484.7	505.7
65°	302.6	333.4	402.1	455.3	476.3
67.5°	266.2	299.8	372.6	425.9	446.9
70°	222.7	264.8	340.4	393.6	414.7
72.5°	182.1	228.3	306.8	358.6	378.2
75°	142.9	194.7	271.8	318.0	327.8
77.5°	106.5	161.1	235.3	255.0	248.0
80°	75.6	128.9	183.5	173.7	177.9
82.5°	49.0	98.1	113.5	128.9	133.1
85°	28.0	57.4	70.0	75.6	78.4
87.5°	12.6	21.0	28.0	28.0	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)