

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: P276907

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276907  
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: 24CZ2-40HE-RDP-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2701.5 lumens  
Efficiency: N/A  
Efficacy: 92.8 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

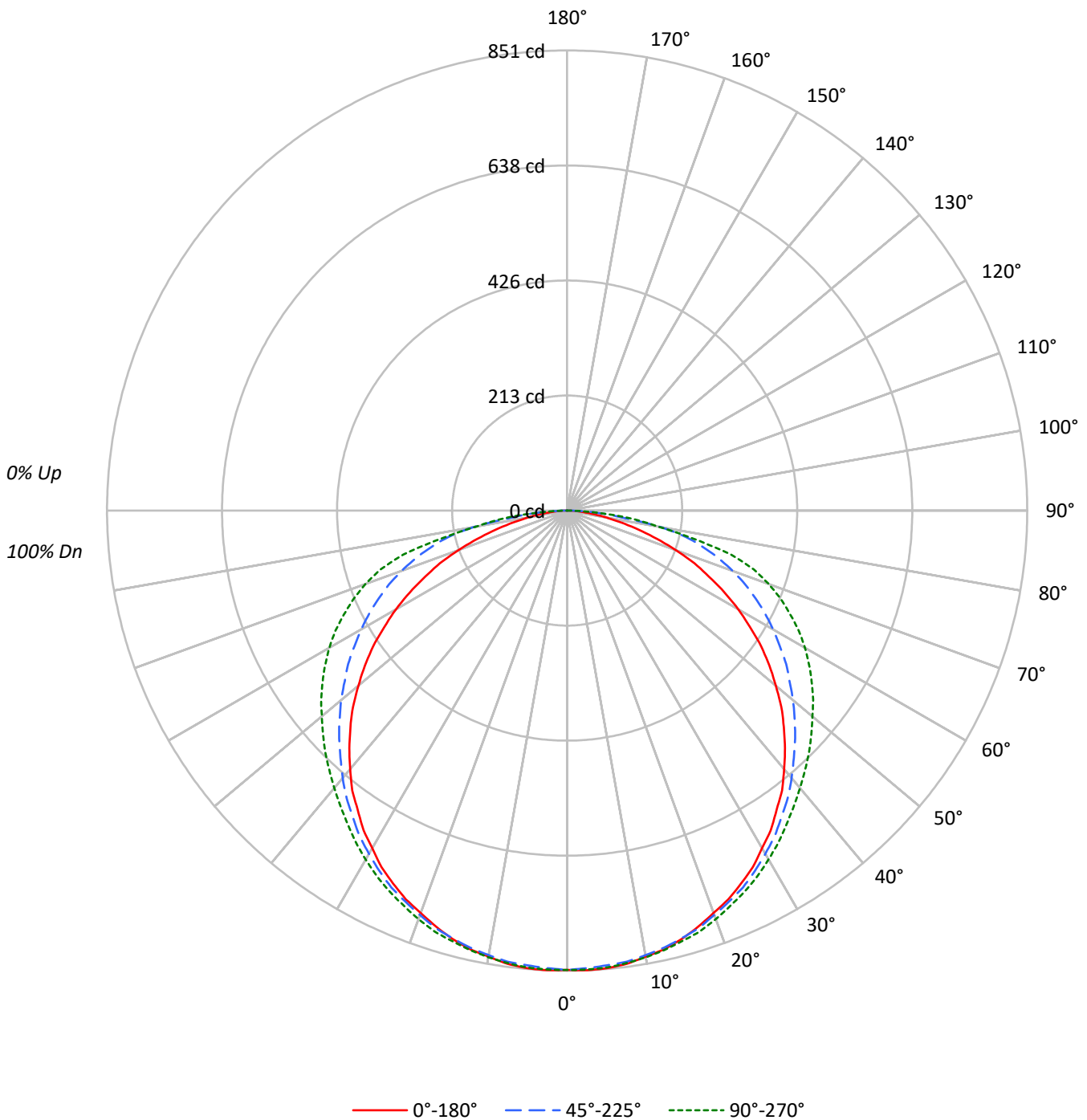
Input Watts (W): 29.109  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1143	1143	1143
5°	1147	1140	1146
10°	1144	1141	1146
15°	1142	1140	1148
20°	1134	1140	1151
25°	1130	1142	1154
30°	1120	1139	1157
35°	1109	1136	1162
40°	1097	1134	1177
45°	1079	1135	1204
50°	1055	1142	1240
55°	1028	1160	1295
60°	984	1183	1366
65°	921	1224	1450
70°	838	1281	1560
75°	711	1352	1630
80°	561	1360	1319
85°	414	1034	1158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.6	3.0
10°-20°	231.9	8.6
20°-30°	354.7	13.1
30°-40°	433.6	16.0
40°-50°	462.1	17.1
50°-60°	441.8	16.4
60°-70°	374.3	13.9
70°-80°	251.6	9.3
80°-90°	71.0	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°	667.2	24.7
0°-40°	1100.8	40.7
0°-60°	2004.7	74.2
0°-90°	2701.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2701.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	850	848	844	848	848	81
15°	820	820	819	825	824	231
25°	761	764	769	776	777	351
35°	675	681	691	705	708	423
45°	567	576	596	622	632	437
55°	438	454	494	533	552	390
65°	289	319	385	436	456	287
75°	137	186	260	304	314	146
85°	27	55	67	72	75	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	849.5	849.5	849.5	849.5	849.5
2.5°	850.9	850.9	846.9	849.5	849.5
5°	849.5	848.2	844.2	848.2	848.2
7.5°	845.5	844.2	841.5	845.5	844.2
10°	837.5	837.5	834.8	838.8	838.8
12.5°	830.8	829.4	828.1	833.5	832.1
15°	820.1	820.1	818.7	825.4	824.1
17.5°	806.7	808.0	809.3	814.7	816.0
20°	791.9	794.6	795.9	804.0	804.0
22.5°	778.5	779.9	782.5	790.6	790.6
25°	761.1	763.8	769.1	775.8	777.2
27.5°	743.7	745.0	751.7	761.1	762.4
30°	720.9	724.9	733.0	743.7	745.0
32.5°	700.8	704.8	714.2	724.9	727.6
35°	675.3	680.7	691.4	704.8	707.5
37.5°	652.6	656.6	670.0	684.7	688.7
40°	624.4	632.5	645.9	663.3	670.0
42.5°	596.3	604.3	620.4	643.2	651.2
45°	566.8	576.2	596.3	621.7	632.5
47.5°	537.3	548.0	570.8	600.3	612.4
50°	503.8	517.2	545.4	578.9	592.3
52.5°	471.7	487.8	518.6	556.1	573.5
55°	438.2	454.3	494.5	533.3	552.1
57.5°	400.7	422.1	466.3	510.5	530.6
60°	365.8	385.9	439.5	487.8	507.8
62.5°	328.3	355.1	412.7	463.6	483.7
65°	289.4	318.9	384.6	435.5	455.6
67.5°	254.6	286.8	356.4	407.4	427.5
70°	213.1	253.3	325.6	376.5	396.6
72.5°	174.2	218.4	293.5	343.0	361.8
75°	136.7	186.3	260.0	304.2	313.6
77.5°	101.8	154.1	225.1	243.9	237.2
80°	72.4	123.3	175.5	166.2	170.2
82.5°	46.9	93.8	108.5	123.3	127.3
85°	26.8	54.9	67.0	72.4	75.0
87.5°	12.1	20.1	26.8	26.8	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)