

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: P276901

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276901  
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-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2446.4 lumens  
Efficiency: N/A  
Efficacy: 87.1 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

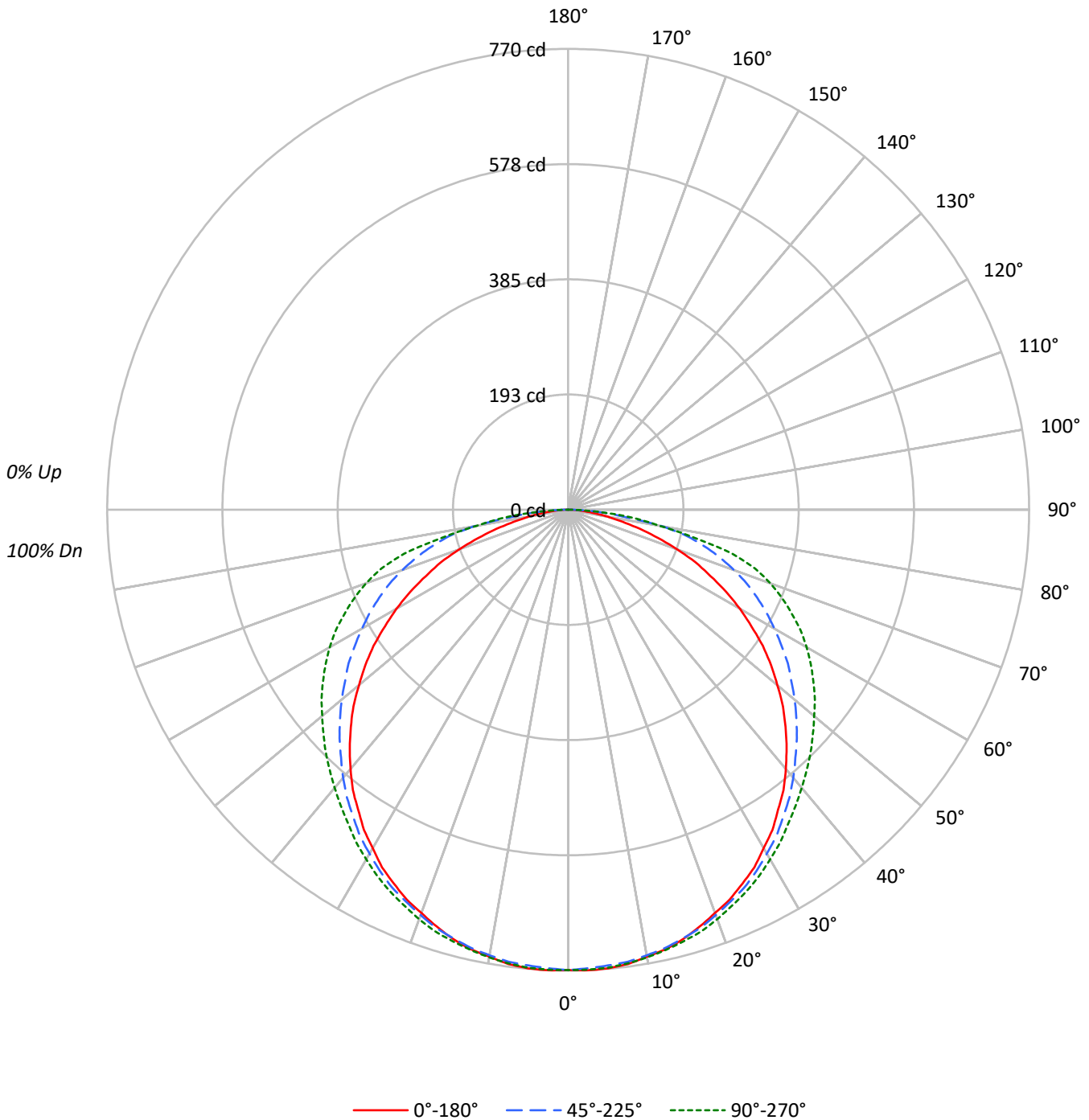
Input Watts (W): 28.086  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1035	1035	1035
5°	1039	1033	1037
10°	1036	1033	1038
15°	1034	1033	1040
20°	1027	1032	1043
25°	1023	1034	1045
30°	1014	1031	1048
35°	1005	1028	1052
40°	993	1027	1066
45°	977	1028	1090
50°	955	1034	1123
55°	931	1050	1173
60°	892	1071	1238
65°	834	1109	1314
70°	759	1160	1413
75°	644	1224	1476
80°	508	1232	1194
85°	375	937	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.0	3.0
10°-20°	210.0	8.6
20°-30°	321.2	13.1
30°-40°	392.6	16.0
40°-50°	418.5	17.1
50°-60°	400.1	16.4
60°-70°	339.0	13.9
70°-80°	227.8	9.3
80°-90°	64.3	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°	604.2	24.7
0°-40°	996.8	40.7
0°-60°	1815.4	74.2
0°-90°	2446.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2446.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	769	769	769	769	769	
5°	769	768	764	768	768	73
15°	743	743	741	748	746	209
25°	689	692	696	703	704	318
35°	612	616	626	638	641	383
45°	513	522	540	563	573	396
55°	397	411	448	483	500	353
65°	262	289	348	394	413	260
75°	124	169	235	275	284	133
85°	24	50	61	66	68	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	769.3	769.3	769.3	769.3	769.3
2.5°	770.5	770.5	766.9	769.3	769.3
5°	769.3	768.1	764.5	768.1	768.1
7.5°	765.7	764.5	762.0	765.7	764.5
10°	758.4	758.4	756.0	759.6	759.6
12.5°	752.3	751.1	749.9	754.7	753.5
15°	742.6	742.6	741.4	747.5	746.3
17.5°	730.5	731.7	732.9	737.8	739.0
20°	717.1	719.6	720.8	728.1	728.1
22.5°	705.0	706.2	708.6	715.9	715.9
25°	689.2	691.7	696.5	702.6	703.8
27.5°	673.5	674.7	680.7	689.2	690.4
30°	652.8	656.5	663.7	673.5	674.7
32.5°	634.6	638.3	646.8	656.5	658.9
35°	611.6	616.4	626.1	638.3	640.7
37.5°	590.9	594.6	606.7	620.1	623.7
40°	565.5	572.7	584.9	600.6	606.7
42.5°	540.0	547.3	561.8	582.4	589.7
45°	513.3	521.8	540.0	563.0	572.7
47.5°	486.6	496.3	516.9	543.6	554.5
50°	456.2	468.4	493.9	524.2	536.3
52.5°	427.1	441.7	469.6	503.6	519.3
55°	396.8	411.4	447.8	482.9	499.9
57.5°	362.8	382.2	422.3	462.3	480.5
60°	331.3	349.5	398.0	441.7	459.9
62.5°	297.3	321.6	373.7	419.8	438.0
65°	262.1	288.8	348.3	394.4	412.6
67.5°	230.6	259.7	322.8	368.9	387.1
70°	192.9	229.3	294.9	341.0	359.2
72.5°	157.7	197.8	265.7	310.6	327.6
75°	123.8	168.7	235.4	275.4	283.9
77.5°	92.2	139.5	203.9	220.8	214.8
80°	65.5	111.6	159.0	150.5	154.1
82.5°	42.5	84.9	98.3	111.6	115.3
85°	24.3	49.8	60.7	65.5	68.0
87.5°	10.9	18.2	24.3	24.3	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)