

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: P276900

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276900  
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-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: 2377.6 lumens  
Efficiency: N/A  
Efficacy: 84.1 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

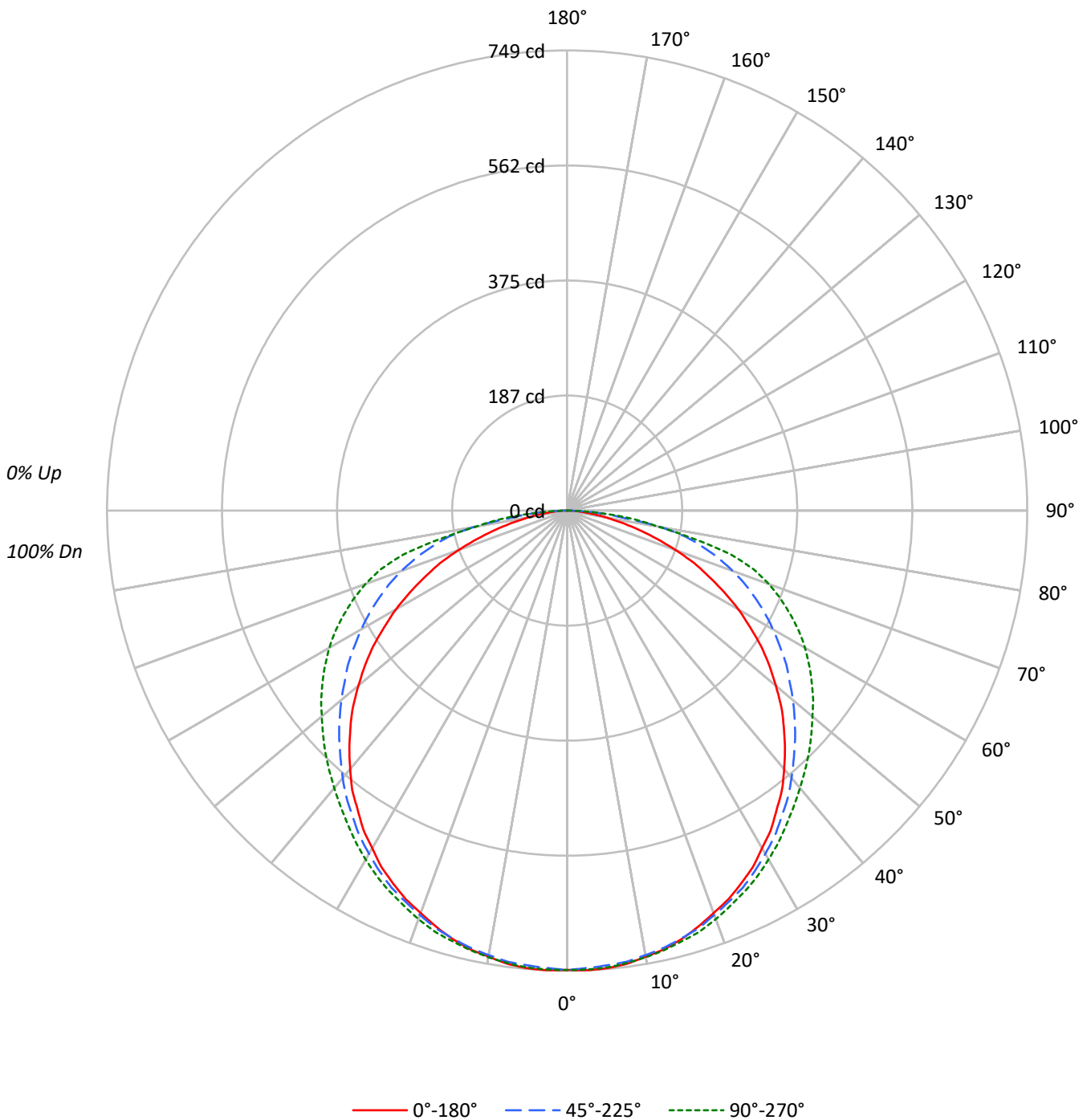
Input Watts (W): 28.272  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1006	1006	1006
5°	1010	1004	1008
10°	1007	1004	1009
15°	1005	1004	1010
20°	998	1003	1013
25°	995	1005	1015
30°	986	1002	1019
35°	976	999	1023
40°	965	998	1036
45°	949	999	1059
50°	928	1005	1091
55°	905	1021	1140
60°	866	1041	1203
65°	811	1078	1277
70°	738	1127	1373
75°	625	1189	1435
80°	494	1197	1161
85°	364	911	1019



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.9	3.0
10°-20°	204.1	8.6
20°-30°	312.1	13.1
30°-40°	381.6	16.0
40°-50°	406.7	17.1
50°-60°	388.9	16.4
60°-70°	329.4	13.9
70°-80°	221.4	9.3
80°-90°	62.5	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°	587.2	24.7
0°-40°	968.8	40.7
0°-60°	1764.4	74.2
0°-90°	2377.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2377.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	748	746	743	746	746	71
15°	722	722	721	726	725	204
25°	670	672	677	683	684	309
35°	594	599	608	620	623	372
45°	499	507	525	547	557	385
55°	386	400	435	469	486	343
65°	255	281	338	383	401	253
75°	120	164	229	268	276	129
85°	24	48	59	64	66	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	747.7	747.7	747.7	747.7	747.7
2.5°	748.9	748.9	745.3	747.7	747.7
5°	747.7	746.5	743.0	746.5	746.5
7.5°	744.2	743.0	740.6	744.2	743.0
10°	737.1	737.1	734.7	738.3	738.3
12.5°	731.2	730.0	728.8	733.5	732.4
15°	721.8	721.8	720.6	726.5	725.3
17.5°	710.0	711.1	712.3	717.0	718.2
20°	697.0	699.3	700.5	707.6	707.6
22.5°	685.2	686.4	688.7	695.8	695.8
25°	669.9	672.2	676.9	682.8	684.0
27.5°	654.5	655.7	661.6	669.9	671.0
30°	634.5	638.0	645.1	654.5	655.7
32.5°	616.8	620.3	628.6	638.0	640.4
35°	594.4	599.1	608.5	620.3	622.7
37.5°	574.3	577.9	589.7	602.6	606.2
40°	549.6	556.6	568.4	583.8	589.7
42.5°	524.8	531.9	546.0	566.1	573.2
45°	498.9	507.1	524.8	547.2	556.6
47.5°	472.9	482.4	502.4	528.3	539.0
50°	443.4	455.2	480.0	509.5	521.3
52.5°	415.1	429.3	456.4	489.4	504.8
55°	385.6	399.8	435.2	469.4	485.9
57.5°	352.6	371.5	410.4	449.3	467.0
60°	322.0	339.7	386.8	429.3	447.0
62.5°	288.9	312.5	363.2	408.1	425.7
65°	254.7	280.7	338.5	383.3	401.0
67.5°	224.1	252.4	313.7	358.5	376.2
70°	187.5	222.9	286.6	331.4	349.1
72.5°	153.3	192.2	258.3	301.9	318.4
75°	120.3	163.9	228.8	267.7	276.0
77.5°	89.6	135.6	198.1	214.6	208.7
80°	63.7	108.5	154.5	146.2	149.8
82.5°	41.3	82.6	95.5	108.5	112.0
85°	23.6	48.4	59.0	63.7	66.0
87.5°	10.6	17.7	23.6	23.6	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)