

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: P276904

Luminaire Tested: **24CZ2-40HE-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276904  
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-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2632.7 lumens  
Efficiency: N/A  
Efficacy: 91.3 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

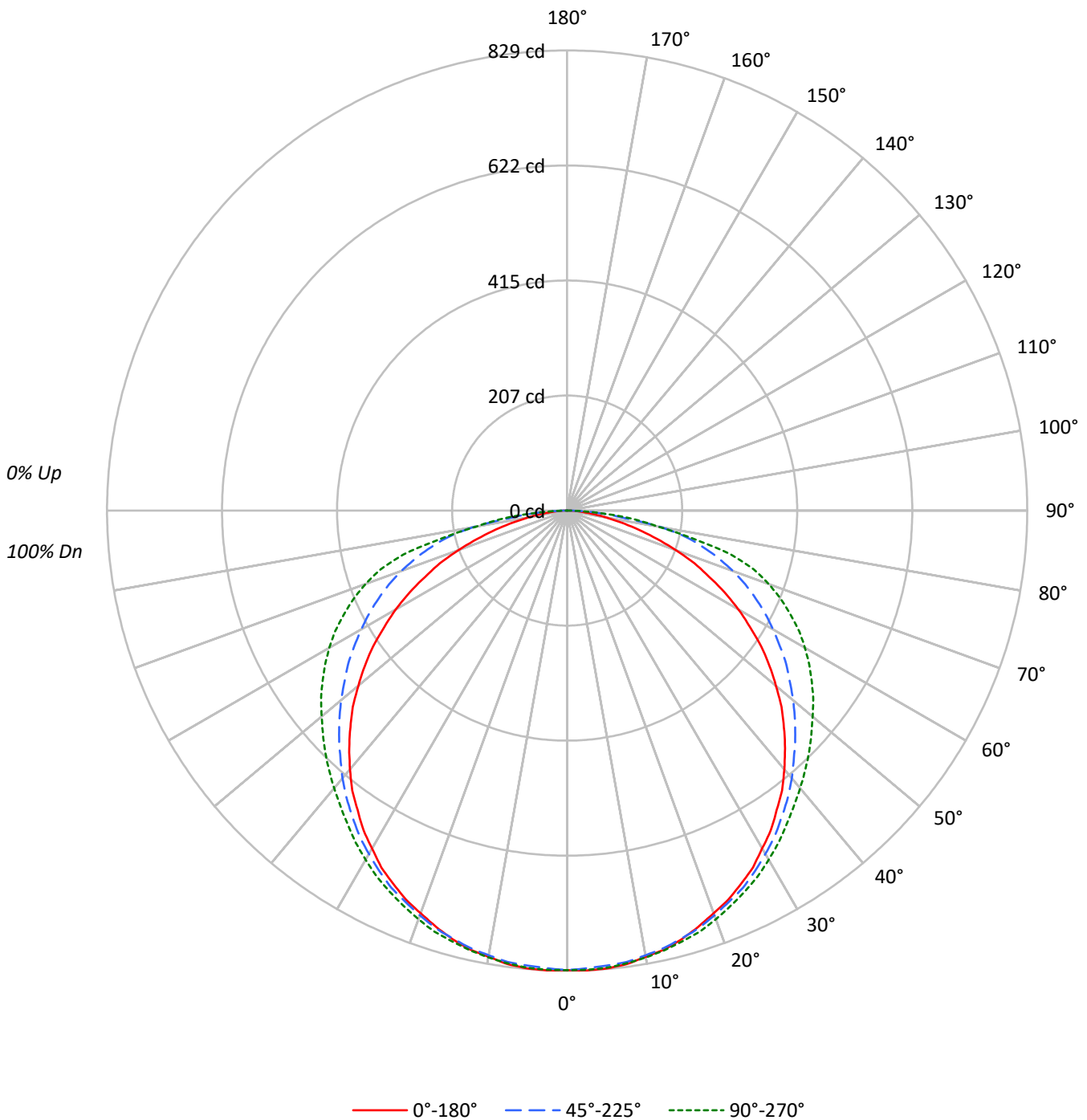
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1114	1114	1114
5°	1118	1111	1116
10°	1115	1112	1117
15°	1113	1111	1119
20°	1105	1111	1122
25°	1101	1113	1124
30°	1092	1110	1128
35°	1081	1107	1133
40°	1069	1105	1147
45°	1051	1106	1173
50°	1028	1113	1208
55°	1002	1130	1262
60°	959	1153	1332
65°	898	1193	1414
70°	817	1248	1520
75°	692	1317	1589
80°	546	1326	1285
85°	403	1008	1129



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.5	3.0
10°-20°	226.0	8.6
20°-30°	345.6	13.1
30°-40°	422.5	16.0
40°-50°	450.3	17.1
50°-60°	430.6	16.4
60°-70°	364.8	13.9
70°-80°	245.1	9.3
80°-90°	69.1	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°	650.2	24.7
0°-40°	1072.8	40.7
0°-60°	1953.7	74.2
0°-90°	2632.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2632.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	828	828	828	828	828	
5°	828	827	823	827	827	79
15°	799	799	798	804	803	225
25°	742	744	750	756	757	342
35°	658	663	674	687	690	412
45°	552	562	581	606	616	426
55°	427	443	482	520	538	380
65°	282	311	375	424	444	280
75°	133	182	253	296	306	143
85°	26	54	65	70	73	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	827.9	827.9	827.9	827.9	827.9
2.5°	829.2	829.2	825.3	827.9	827.9
5°	827.9	826.6	822.7	826.6	826.6
7.5°	824.0	822.7	820.1	824.0	822.7
10°	816.2	816.2	813.6	817.5	817.5
12.5°	809.7	808.3	807.0	812.3	811.0
15°	799.2	799.2	797.9	804.4	803.1
17.5°	786.1	787.5	788.8	794.0	795.3
20°	771.8	774.4	775.7	783.5	783.5
22.5°	758.7	760.0	762.6	770.5	770.5
25°	741.7	744.4	749.6	756.1	757.4
27.5°	724.8	726.1	732.6	741.7	743.1
30°	702.6	706.5	714.3	724.8	726.1
32.5°	683.0	686.9	696.0	706.5	709.1
35°	658.2	663.4	673.8	686.9	689.5
37.5°	636.0	639.9	652.9	667.3	671.2
40°	608.5	616.4	629.4	646.4	652.9
42.5°	581.1	589.0	604.6	626.8	634.7
45°	552.4	561.5	581.1	605.9	616.4
47.5°	523.7	534.1	556.3	585.0	596.8
50°	491.0	504.1	531.5	564.1	577.2
52.5°	459.7	475.3	505.4	541.9	558.9
55°	427.0	442.7	481.9	519.7	538.0
57.5°	390.5	411.4	454.4	497.5	517.1
60°	356.5	376.1	428.3	475.3	494.9
62.5°	319.9	346.1	402.2	451.8	471.4
65°	282.1	310.8	374.8	424.4	444.0
67.5°	248.1	279.5	347.4	397.0	416.6
70°	207.6	246.8	317.3	367.0	386.5
72.5°	169.8	212.9	286.0	334.3	352.6
75°	133.2	181.5	253.3	296.4	305.6
77.5°	99.2	150.2	219.4	237.7	231.1
80°	70.5	120.1	171.1	161.9	165.8
82.5°	45.7	91.4	105.8	120.1	124.1
85°	26.1	53.5	65.3	70.5	73.1
87.5°	11.8	19.6	26.1	26.1	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)