

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: P276289

Luminaire Tested: **24CZ2-40-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276289  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-UNV-L92765-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3470.0 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

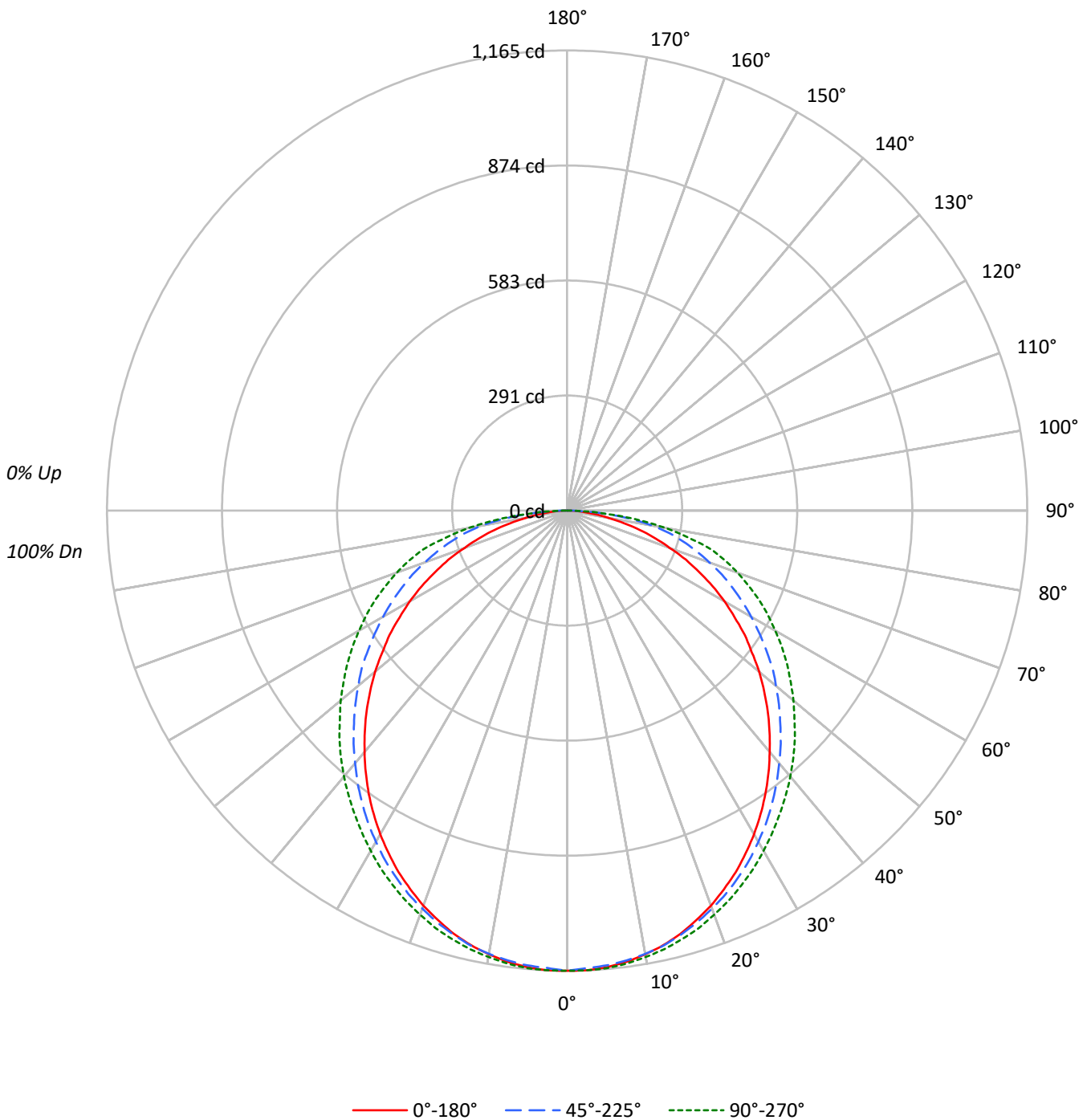
Input Watts (W): 30.969  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82					82			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67					67			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56					56			
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48					48			
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41					41			
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36					36			
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32					32			
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28					28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25					25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23					23			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1567	1567	1567
5°	1567	1561	1570
10°	1558	1557	1568
15°	1545	1549	1565
20°	1524	1536	1559
25°	1499	1522	1552
30°	1470	1504	1546
35°	1438	1486	1541
40°	1401	1467	1544
45°	1366	1452	1551
50°	1328	1445	1566
55°	1288	1442	1595
60°	1237	1449	1636
65°	1173	1471	1707
70°	1089	1508	1804
75°	993	1583	1957
80°	817	1705	1956
85°	625	1573	1681



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.2	3.2
10°-20°	314.6	9.1
20°-30°	473.4	13.6
30°-40°	567.3	16.3
40°-50°	591.2	17.0
50°-60°	550.0	15.9
60°-70°	453.0	13.1
70°-80°	308.5	8.9
80°-90°	101.9	2.9
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°	898.1	25.9
0°-40°	1465.4	42.2
0°-60°	2606.6	75.1
0°-90°	3470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3470.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1165	1165	1165	1165	1165	
5°	1160	1160	1156	1162	1163	110
15°	1109	1111	1112	1122	1123	313
25°	1010	1014	1025	1042	1046	465
35°	876	886	904	929	938	547
45°	718	733	763	801	815	554
55°	549	568	615	664	680	489
65°	368	400	462	516	536	366
75°	191	234	305	359	376	201
85°	40	79	102	109	109	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1165.0	1165.0	1165.0	1165.0	1165.0
2.5°	1165.0	1165.0	1159.2	1165.0	1165.0
5°	1160.4	1160.4	1155.8	1161.5	1162.7
7.5°	1152.3	1153.4	1148.8	1155.8	1156.9
10°	1140.7	1141.9	1139.5	1146.5	1147.6
12.5°	1126.8	1128.0	1128.0	1136.1	1137.2
15°	1109.4	1110.6	1111.7	1122.2	1123.3
17.5°	1087.4	1090.9	1093.2	1106.0	1108.3
20°	1064.3	1067.7	1072.4	1086.3	1088.6
22.5°	1037.6	1042.3	1050.4	1065.4	1068.9
25°	1009.8	1014.5	1024.9	1042.3	1045.7
27.5°	978.6	985.5	998.3	1016.8	1021.4
30°	946.1	953.1	968.1	987.8	994.8
32.5°	911.4	920.7	938.0	960.0	967.0
35°	875.5	885.9	904.5	928.8	938.0
37.5°	837.3	848.9	870.9	897.5	909.1
40°	797.9	811.8	835.0	866.2	879.0
42.5°	758.5	771.3	800.2	833.8	847.7
45°	718.0	733.1	763.2	801.4	815.3
47.5°	676.3	691.4	727.3	767.8	780.5
50°	634.6	649.7	690.2	733.1	748.1
52.5°	589.5	609.1	655.5	698.3	713.4
55°	548.9	567.5	614.9	663.6	679.8
57.5°	502.6	524.6	576.7	627.7	645.0
60°	459.8	482.9	538.5	590.6	608.0
62.5°	415.7	441.2	500.3	553.6	573.2
65°	368.3	399.5	462.1	516.5	536.2
67.5°	325.4	357.8	423.9	479.4	496.8
70°	276.8	316.2	383.3	438.9	458.6
72.5°	235.1	274.5	345.1	399.5	419.2
75°	191.1	233.9	304.6	359.0	376.4
77.5°	147.1	194.6	265.2	306.9	312.7
80°	105.4	155.2	220.0	244.4	252.5
82.5°	74.1	119.3	162.1	178.3	183.0
85°	40.5	78.7	101.9	108.9	108.9
87.5°	17.4	33.6	40.5	41.7	42.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)