

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: P276302

Luminaire Tested: **24CZ2-45-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276302  
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: 24CZ2-45-UNV-L92765-W2A1-U-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4068.8 lumens  
Efficiency: N/A  
Efficacy: 111.0 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

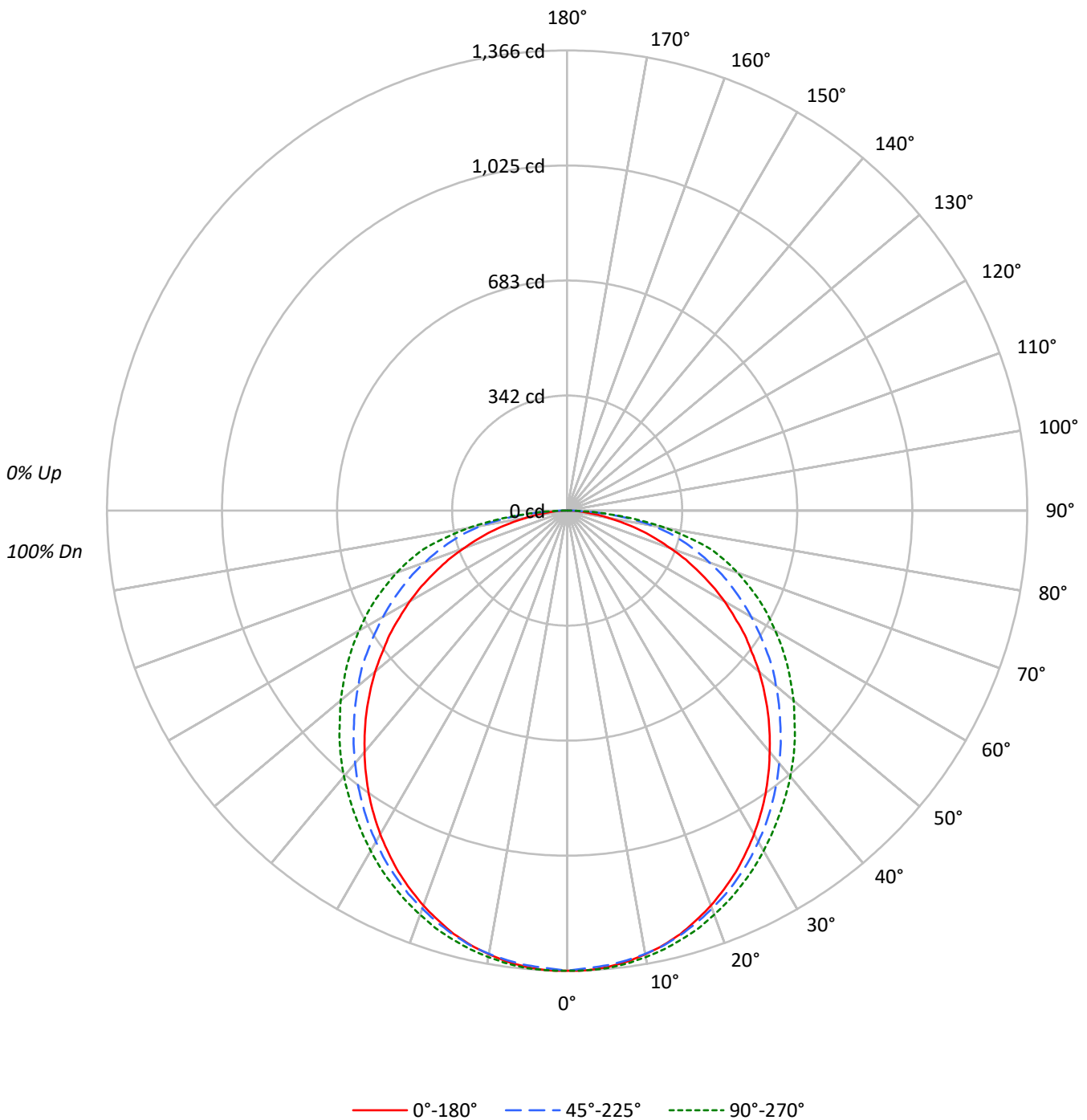
Input Watts (W): 36.642  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1838	1838	1838
5°	1838	1830	1841
10°	1827	1826	1839
15°	1812	1816	1835
20°	1787	1800	1828
25°	1758	1784	1820
30°	1724	1764	1812
35°	1686	1742	1807
40°	1643	1720	1810
45°	1602	1703	1819
50°	1558	1694	1836
55°	1510	1692	1870
60°	1451	1699	1918
65°	1375	1725	2002
70°	1277	1768	2115
75°	1165	1856	2294
80°	958	1999	2294
85°	733	1845	1970



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.2	3.2
10°-20°	368.8	9.1
20°-30°	555.1	13.6
30°-40°	665.2	16.3
40°-50°	693.2	17.0
50°-60°	644.9	15.9
60°-70°	531.2	13.1
70°-80°	361.8	8.9
80°-90°	119.4	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°	1053.1	25.9
0°-40°	1718.3	42.2
0°-60°	3056.4	75.1
0°-90°	4068.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4068.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1361	1361	1355	1362	1363	129
15°	1301	1302	1304	1316	1317	366
25°	1184	1190	1202	1222	1226	545
35°	1027	1039	1060	1089	1100	642
45°	842	860	895	940	956	649
55°	644	665	721	778	797	574
65°	432	468	542	606	629	429
75°	224	274	357	421	441	236
85°	48	92	120	128	128	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1366.1	1366.1	1366.1	1366.1	1366.1
2.5°	1366.1	1366.1	1359.3	1366.1	1366.1
5°	1360.6	1360.6	1355.2	1362.0	1363.4
7.5°	1351.1	1352.5	1347.1	1355.2	1356.6
10°	1337.6	1338.9	1336.2	1344.3	1345.7
12.5°	1321.3	1322.6	1322.6	1332.1	1333.5
15°	1300.9	1302.2	1303.6	1315.8	1317.2
17.5°	1275.1	1279.2	1281.9	1296.8	1299.5
20°	1247.9	1252.0	1257.4	1273.7	1276.4
22.5°	1216.7	1222.1	1231.6	1249.3	1253.4
25°	1184.1	1189.5	1201.8	1222.1	1226.2
27.5°	1147.4	1155.6	1170.5	1192.3	1197.7
30°	1109.4	1117.6	1135.2	1158.3	1166.5
32.5°	1068.7	1079.5	1099.9	1125.7	1133.9
35°	1026.6	1038.8	1060.5	1089.1	1099.9
37.5°	981.8	995.4	1021.2	1052.4	1066.0
40°	935.6	951.9	979.1	1015.7	1030.7
42.5°	889.4	904.4	938.3	977.7	994.0
45°	841.9	859.6	894.9	939.7	956.0
47.5°	793.0	810.7	852.8	900.3	915.2
50°	744.1	761.8	809.3	859.6	877.2
52.5°	691.2	714.3	768.6	818.8	836.5
55°	643.7	665.4	721.1	778.1	797.1
57.5°	589.3	615.1	676.2	736.0	756.4
60°	539.1	566.3	631.4	692.5	712.9
62.5°	487.5	517.4	586.6	649.1	672.2
65°	431.8	468.5	541.8	605.6	628.7
67.5°	381.6	419.6	497.0	562.2	582.5
70°	324.5	370.7	449.5	514.7	537.7
72.5°	275.7	321.8	404.7	468.5	491.6
75°	224.1	274.3	357.1	421.0	441.3
77.5°	172.5	228.1	311.0	359.8	366.6
80°	123.6	182.0	258.0	286.5	296.0
82.5°	86.9	139.9	190.1	209.1	214.6
85°	47.5	92.3	119.5	127.6	127.6
87.5°	20.4	39.4	47.5	48.9	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)