

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: P276214

Luminaire Tested: **24CZ2-50HE-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276214  
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: 24CZ2-50HE-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3873.9 lumens  
Efficiency: N/A  
Efficacy: 109.6 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

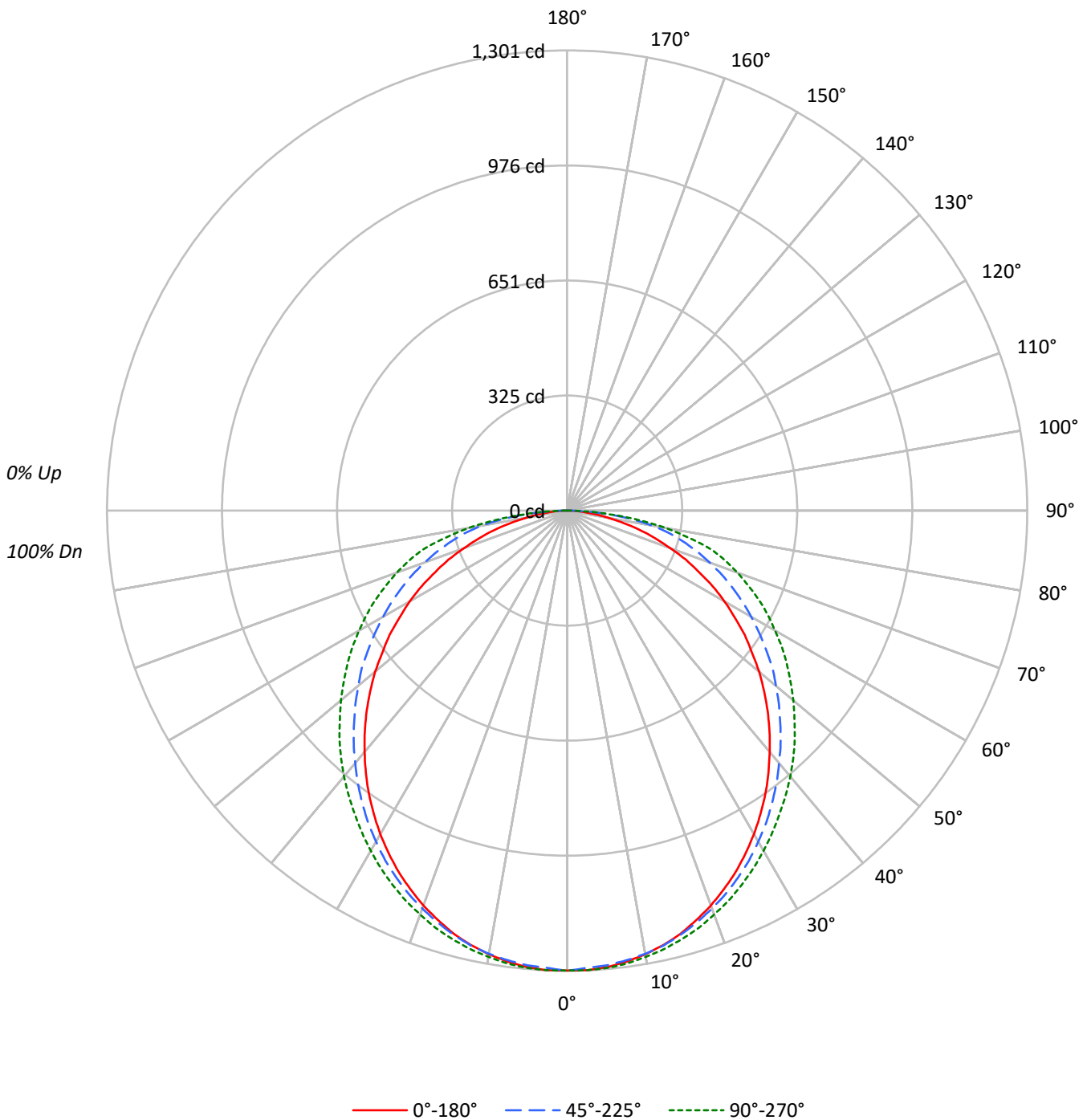
Input Watts (W): 35.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1750	1750	1750
5°	1750	1743	1753
10°	1740	1738	1750
15°	1725	1729	1747
20°	1701	1714	1740
25°	1674	1699	1733
30°	1641	1679	1725
35°	1605	1658	1720
40°	1565	1637	1724
45°	1525	1621	1732
50°	1483	1613	1748
55°	1437	1610	1780
60°	1381	1618	1827
65°	1309	1642	1906
70°	1216	1683	2014
75°	1109	1768	2184
80°	912	1903	2183
85°	699	1757	1876



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.0	3.2
10°-20°	351.2	9.1
20°-30°	528.5	13.6
30°-40°	633.3	16.3
40°-50°	660.0	17.0
50°-60°	614.0	15.9
60°-70°	505.7	13.1
70°-80°	344.4	8.9
80°-90°	113.7	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°	1002.7	25.9
0°-40°	1636.0	42.2
0°-60°	2910.0	75.1
0°-90°	3873.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3873.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1301	1301	1301	1301	1301	
5°	1296	1296	1290	1297	1298	123
15°	1239	1240	1241	1253	1254	349
25°	1127	1133	1144	1164	1168	519
35°	977	989	1010	1037	1047	611
45°	802	818	852	895	910	618
55°	613	634	686	741	759	546
65°	411	446	516	577	599	408
75°	213	261	340	401	420	225
85°	45	88	114	122	122	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1300.6	1300.6	1300.6	1300.6	1300.6
2.5°	1300.6	1300.6	1294.2	1300.6	1300.6
5°	1295.5	1295.5	1290.3	1296.8	1298.1
7.5°	1286.4	1287.7	1282.5	1290.3	1291.6
10°	1273.5	1274.8	1272.2	1280.0	1281.2
12.5°	1258.0	1259.3	1259.3	1268.3	1269.6
15°	1238.6	1239.9	1241.2	1252.8	1254.1
17.5°	1214.0	1217.9	1220.5	1234.7	1237.3
20°	1188.2	1192.0	1197.2	1212.7	1215.3
22.5°	1158.4	1163.6	1172.6	1189.5	1193.3
25°	1127.4	1132.6	1144.2	1163.6	1167.5
27.5°	1092.5	1100.2	1114.5	1135.1	1140.3
30°	1056.3	1064.0	1080.8	1102.8	1110.6
32.5°	1017.5	1027.8	1047.2	1071.8	1079.6
35°	977.4	989.1	1009.7	1036.9	1047.2
37.5°	934.8	947.7	972.2	1002.0	1014.9
40°	890.8	906.3	932.2	967.1	981.3
42.5°	846.8	861.1	893.4	930.9	946.4
45°	801.6	818.4	852.0	894.7	910.2
47.5°	755.0	771.8	811.9	857.2	871.4
50°	708.5	725.3	770.6	818.4	835.2
52.5°	658.1	680.1	731.8	779.6	796.4
55°	612.8	633.5	686.5	740.8	758.9
57.5°	561.1	585.7	643.9	700.7	720.1
60°	513.3	539.1	601.2	659.4	678.8
62.5°	464.1	492.6	558.5	618.0	640.0
65°	411.1	446.0	515.9	576.6	598.6
67.5°	363.3	399.5	473.2	535.3	554.6
70°	309.0	353.0	427.9	490.0	512.0
72.5°	262.5	306.4	385.3	446.0	468.0
75°	213.3	261.2	340.0	400.8	420.2
77.5°	164.2	217.2	296.1	342.6	349.1
80°	117.7	173.2	245.6	272.8	281.8
82.5°	82.7	133.2	181.0	199.1	204.3
85°	45.3	87.9	113.8	121.5	121.5
87.5°	19.4	37.5	45.3	46.5	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)