

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: P275957

Luminaire Tested: **24CZ2-45-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275957  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4051.0 lumens  
Efficiency: N/A  
Efficacy: 116.2 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

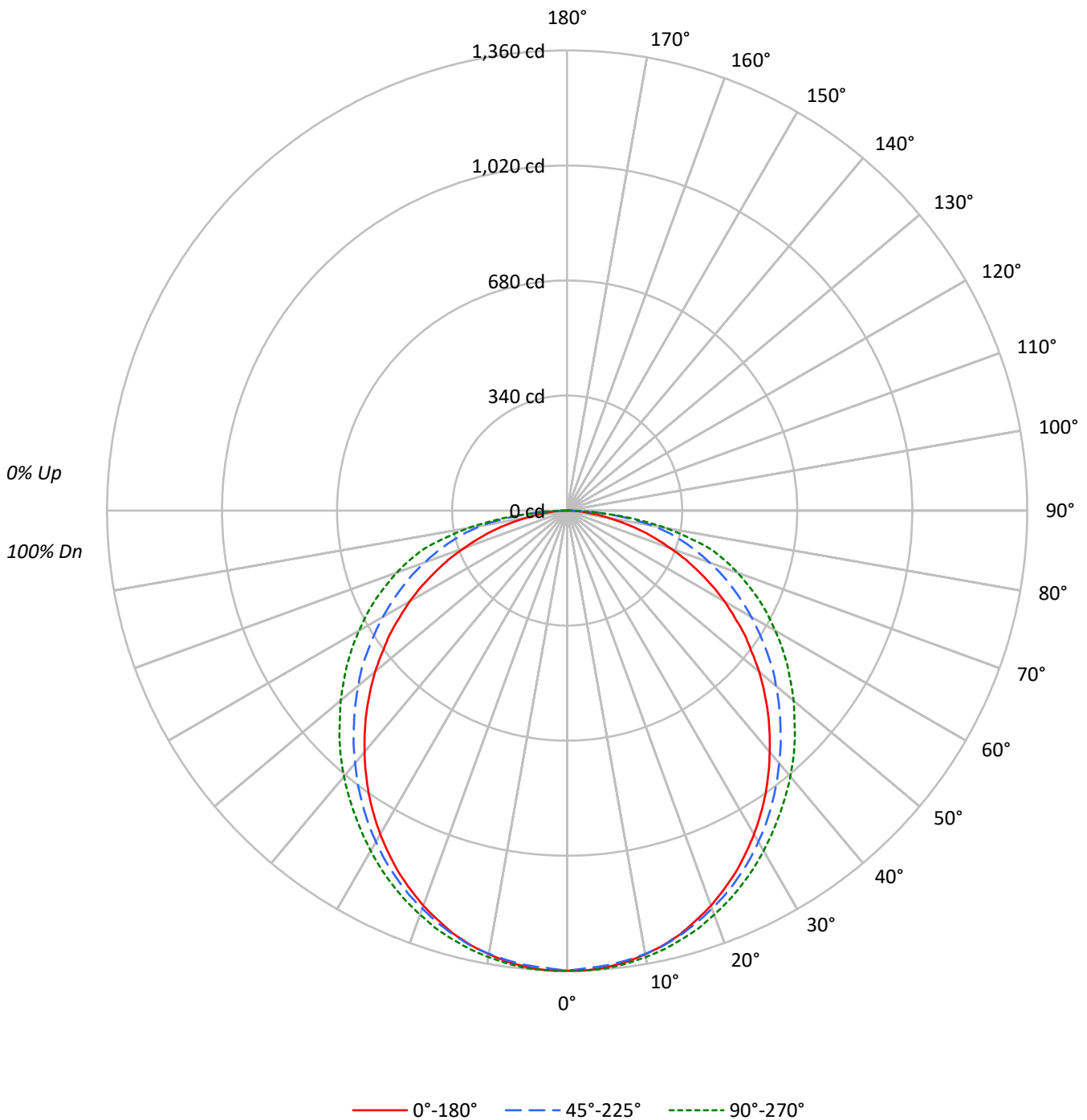
Input Watts (W): 34.875  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1830	1830	1830
5°	1830	1822	1833
10°	1819	1818	1830
15°	1804	1808	1827
20°	1779	1793	1820
25°	1750	1776	1813
30°	1716	1756	1804
35°	1679	1734	1799
40°	1636	1712	1802
45°	1595	1695	1811
50°	1551	1687	1828
55°	1503	1684	1862
60°	1444	1692	1910
65°	1369	1717	1993
70°	1271	1760	2106
75°	1160	1849	2284
80°	953	1991	2283
85°	730	1837	1962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.6	3.2
10°-20°	367.2	9.1
20°-30°	552.6	13.6
30°-40°	662.3	16.3
40°-50°	690.2	17.0
50°-60°	642.1	15.9
60°-70°	528.9	13.1
70°-80°	360.2	8.9
80°-90°	118.9	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°	1048.5	25.9
0°-40°	1710.8	42.2
0°-60°	3043.1	75.1
0°-90°	4051.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4051.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1355	1355	1349	1356	1357	129
15°	1295	1297	1298	1310	1311	365
25°	1179	1184	1196	1217	1221	543
35°	1022	1034	1056	1084	1095	639
45°	838	856	891	936	952	647
55°	641	662	718	775	794	571
65°	430	466	539	603	626	427
75°	223	273	356	419	439	235
85°	47	92	119	127	127	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1360.1	1360.1	1360.1	1360.1	1360.1
2.5°	1360.1	1360.1	1353.3	1360.1	1360.1
5°	1354.7	1354.7	1349.3	1356.1	1357.4
7.5°	1345.2	1346.6	1341.2	1349.3	1350.6
10°	1331.7	1333.1	1330.4	1338.5	1339.8
12.5°	1315.5	1316.8	1316.8	1326.3	1327.7
15°	1295.2	1296.6	1297.9	1310.1	1311.4
17.5°	1269.5	1273.6	1276.3	1291.2	1293.9
20°	1242.5	1246.5	1251.9	1268.2	1270.9
22.5°	1211.4	1216.8	1226.3	1243.8	1247.9
25°	1178.9	1184.3	1196.5	1216.8	1220.9
27.5°	1142.4	1150.5	1165.4	1187.1	1192.5
30°	1104.6	1112.7	1130.3	1153.3	1161.4
32.5°	1064.0	1074.8	1095.1	1120.8	1128.9
35°	1022.1	1034.3	1055.9	1084.3	1095.1
37.5°	977.5	991.0	1016.7	1047.8	1061.3
40°	931.5	947.7	974.8	1011.3	1026.2
42.5°	885.6	900.4	934.2	973.4	989.7
45°	838.2	855.8	891.0	935.6	951.8
47.5°	789.6	807.1	849.1	896.4	911.2
50°	740.9	758.5	805.8	855.8	873.4
52.5°	688.2	711.2	765.2	815.3	832.8
55°	640.8	662.5	717.9	774.7	793.6
57.5°	586.8	612.5	673.3	732.8	753.1
60°	536.7	563.8	628.7	689.5	709.8
62.5°	485.4	515.1	584.1	646.3	669.2
65°	429.9	466.4	539.4	603.0	626.0
67.5°	379.9	417.8	494.8	559.7	580.0
70°	323.1	369.1	447.5	512.4	535.4
72.5°	274.5	320.4	402.9	466.4	489.4
75°	223.1	273.1	355.6	419.1	439.4
77.5°	171.7	227.1	309.6	358.3	365.0
80°	123.0	181.2	256.9	285.3	294.7
82.5°	86.5	139.3	189.3	208.2	213.6
85°	47.3	91.9	119.0	127.1	127.1
87.5°	20.3	39.2	47.3	48.7	50.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)