

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: P275952

Luminaire Tested: **24CZ2-40-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275952  
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-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: 3619.0 lumens  
Efficiency: N/A  
Efficacy: 119.4 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

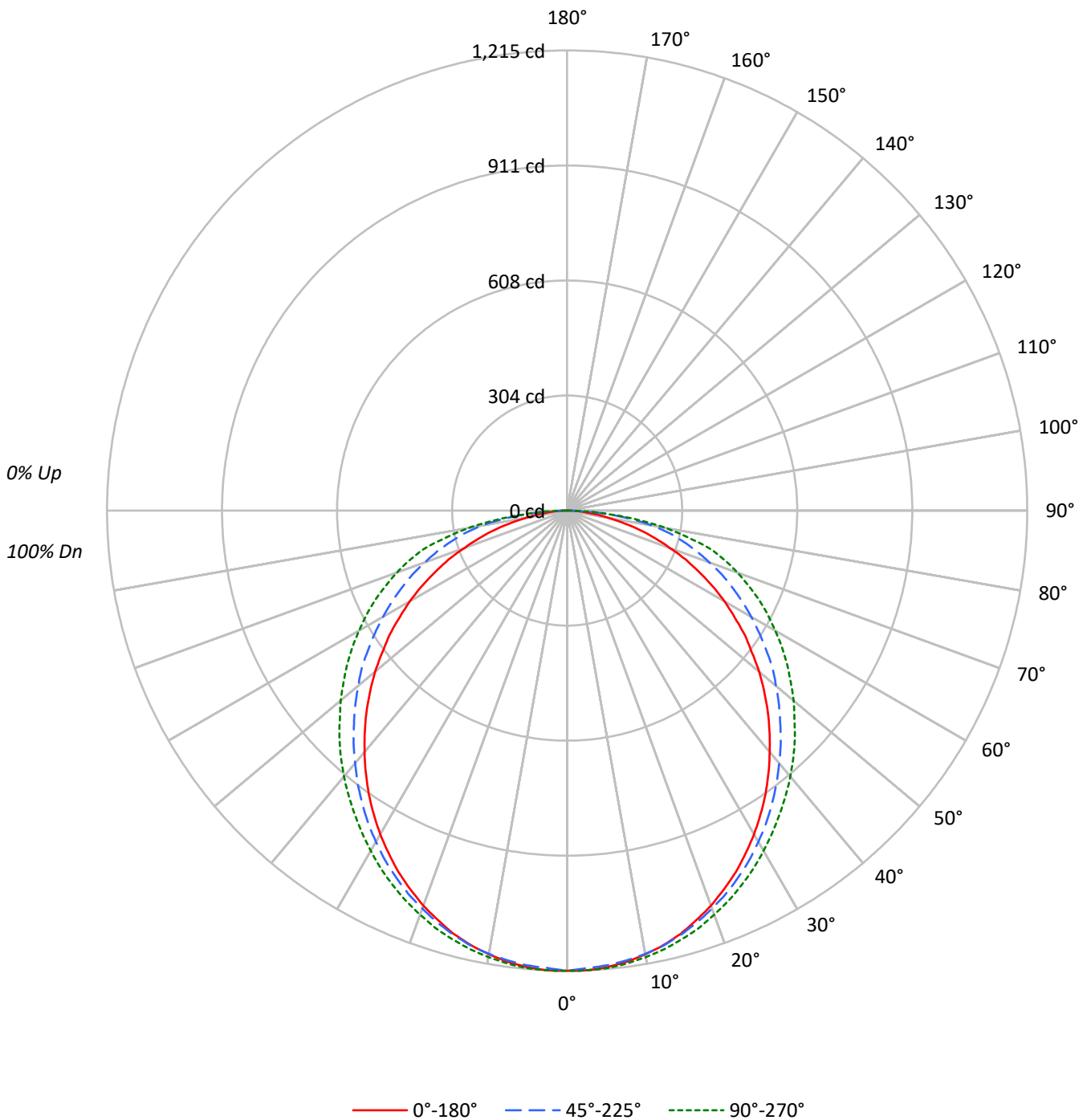
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1635	1635	1635
5°	1635	1628	1638
10°	1625	1624	1635
15°	1612	1615	1632
20°	1589	1601	1626
25°	1564	1587	1619
30°	1533	1569	1612
35°	1500	1549	1607
40°	1462	1529	1610
45°	1425	1515	1618
50°	1385	1507	1633
55°	1343	1505	1663
60°	1290	1511	1706
65°	1223	1534	1780
70°	1136	1573	1882
75°	1036	1652	2040
80°	852	1778	2040
85°	653	1641	1752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.9	3.2
10°-20°	328.1	9.1
20°-30°	493.7	13.6
30°-40°	591.6	16.3
40°-50°	616.6	17.0
50°-60°	573.6	15.9
60°-70°	472.5	13.1
70°-80°	321.8	8.9
80°-90°	106.2	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°	936.7	25.9
0°-40°	1528.3	42.2
0°-60°	2718.5	75.1
0°-90°	3619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3619.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1215	1215	1215	1215	1215	
5°	1210	1210	1205	1211	1213	115
15°	1157	1158	1160	1170	1172	326
25°	1053	1058	1069	1087	1091	485
35°	913	924	943	969	978	571
45°	749	764	796	836	850	578
55°	572	592	641	692	709	510
65°	384	417	482	539	559	381
75°	199	244	318	374	392	210
85°	42	82	106	114	114	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1215.1	1215.1	1215.1	1215.1	1215.1
2.5°	1215.1	1215.1	1209.0	1215.1	1215.1
5°	1210.2	1210.2	1205.4	1211.4	1212.7
7.5°	1201.8	1203.0	1198.2	1205.4	1206.6
10°	1189.7	1190.9	1188.5	1195.7	1196.9
12.5°	1175.2	1176.4	1176.4	1184.9	1186.1
15°	1157.1	1158.3	1159.5	1170.4	1171.6
17.5°	1134.1	1137.8	1140.2	1153.5	1155.9
20°	1110.0	1113.6	1118.4	1132.9	1135.4
22.5°	1082.2	1087.0	1095.5	1111.2	1114.8
25°	1053.2	1058.1	1068.9	1087.0	1090.7
27.5°	1020.6	1027.9	1041.1	1060.5	1065.3
30°	986.8	994.0	1009.7	1030.3	1037.5
32.5°	950.6	960.2	978.3	1001.3	1008.5
35°	913.1	924.0	943.3	968.7	978.3
37.5°	873.3	885.3	908.3	936.1	948.1
40°	832.2	846.7	870.8	903.4	916.7
42.5°	791.1	804.4	834.6	869.6	884.1
45°	748.8	764.5	796.0	835.8	850.3
47.5°	705.4	721.1	758.5	800.8	814.1
50°	661.9	677.6	719.9	764.5	780.3
52.5°	614.8	635.3	683.6	728.3	744.0
55°	572.5	591.8	641.4	692.1	709.0
57.5°	524.2	547.1	601.5	654.6	672.8
60°	479.5	503.7	561.6	616.0	634.1
62.5°	433.6	460.2	521.8	577.3	597.9
65°	384.1	416.7	481.9	538.7	559.2
67.5°	339.4	373.2	442.1	500.0	518.2
70°	288.7	329.7	399.8	457.8	478.3
72.5°	245.2	286.3	359.9	416.7	437.2
75°	199.3	244.0	317.7	374.4	392.5
77.5°	153.4	202.9	276.6	320.1	326.1
80°	109.9	161.8	229.5	254.8	263.3
82.5°	77.3	124.4	169.1	186.0	190.8
85°	42.3	82.1	106.3	113.5	113.5
87.5°	18.1	35.0	42.3	43.5	44.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)