

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: P275668

Luminaire Tested: **14CZ2-44-S-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275668  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-S-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4531.0 lumens  
Efficiency: N/A  
Efficacy: 123.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

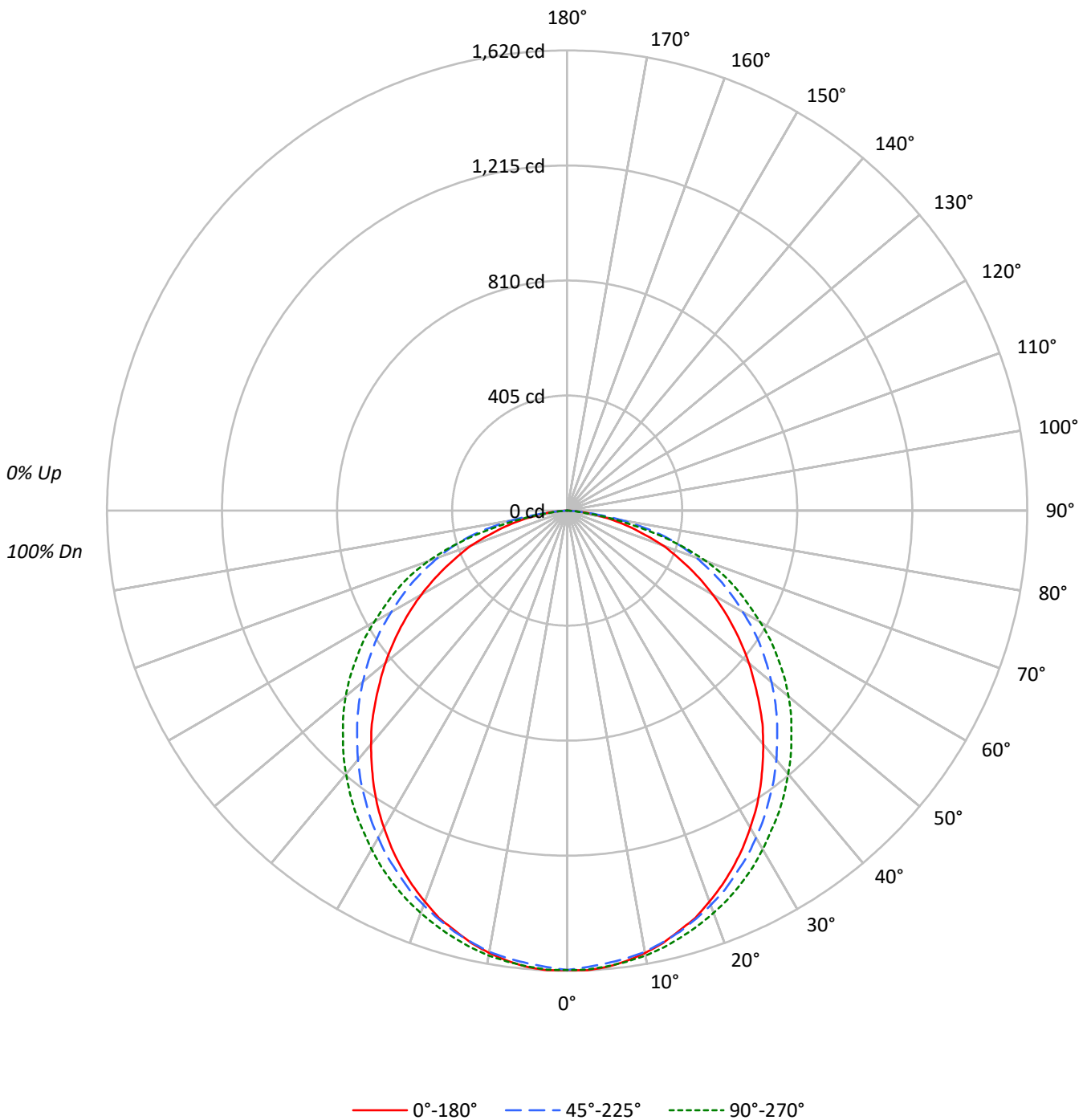
Input Watts (W): 36.642  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	4353	4353	4353
5°	4357	4321	4351
10°	4321	4309	4346
15°	4262	4275	4331
20°	4194	4233	4317
25°	4109	4182	4302
30°	4007	4132	4279
35°	3897	4074	4266
40°	3772	4025	4254
45°	3634	3975	4249
50°	3499	3931	4261
55°	3352	3900	4247
60°	3192	3845	4219
65°	3004	3834	4220
70°	2828	3800	4101
75°	2453	3714	3504
80°	1985	2994	2332
85°	1318	1041	695



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.7	3.4
10°-20°	434.6	9.6
20°-30°	652.0	14.4
30°-40°	777.7	17.2
40°-50°	804.0	17.7
50°-60°	734.1	16.2
60°-70°	577.7	12.7
70°-80°	336.3	7.4
80°-90°	62.0	1.4
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°	1239.3	27.4
0°-40°	2017.0	44.5
0°-60°	3555.1	78.5
0°-90°	4531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4531.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1613	1608	1600	1613	1611	153
15°	1530	1532	1534	1555	1555	432
25°	1384	1391	1409	1442	1449	637
35°	1186	1202	1240	1287	1298	741
45°	955	986	1045	1103	1116	737
55°	714	753	831	892	905	639
65°	472	521	602	649	663	468
75°	236	292	357	350	337	251
85°	43	61	34	27	22	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1617.5	1617.5	1617.5	1617.5	1617.5
2.5°	1619.7	1615.2	1608.5	1619.7	1617.5
5°	1613.0	1608.5	1599.5	1613.0	1610.8
7.5°	1599.5	1595.0	1590.5	1604.0	1601.8
10°	1581.5	1579.3	1577.1	1592.8	1590.5
12.5°	1559.1	1559.1	1556.8	1574.8	1574.8
15°	1529.9	1532.1	1534.4	1554.6	1554.6
17.5°	1502.9	1500.7	1507.4	1529.9	1532.1
20°	1464.7	1469.2	1478.2	1505.2	1507.4
22.5°	1426.5	1431.0	1446.8	1473.7	1480.5
25°	1383.9	1390.6	1408.6	1442.3	1449.0
27.5°	1338.9	1347.9	1372.6	1408.6	1415.3
30°	1289.5	1303.0	1329.9	1370.4	1377.1
32.5°	1240.1	1253.6	1287.3	1327.7	1336.7
35°	1186.2	1201.9	1240.1	1287.3	1298.5
37.5°	1130.0	1150.2	1195.1	1242.3	1255.8
40°	1073.8	1096.3	1145.7	1195.1	1210.9
42.5°	1017.7	1040.1	1094.1	1150.2	1165.9
45°	954.8	986.2	1044.6	1103.0	1116.5
47.5°	894.1	927.8	993.0	1051.4	1069.3
50°	835.7	869.4	939.0	999.7	1017.7
52.5°	775.0	811.0	885.1	948.0	963.8
55°	714.4	752.6	831.2	891.9	905.3
57.5°	653.7	694.2	775.0	833.5	849.2
60°	593.1	635.8	714.4	772.8	784.0
62.5°	532.4	577.4	658.2	709.9	721.1
65°	471.8	521.2	602.1	649.2	662.7
67.5°	413.4	462.8	541.4	586.3	597.6
70°	359.4	404.4	483.0	516.7	521.2
72.5°	292.0	348.2	424.6	442.6	431.3
75°	235.9	292.0	357.2	350.5	337.0
77.5°	179.7	235.9	278.6	256.1	238.1
80°	128.1	184.2	193.2	159.5	150.5
82.5°	83.1	128.1	107.8	83.1	67.4
85°	42.7	60.7	33.7	27.0	22.5
87.5°	13.5	9.0	4.5	4.5	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)