

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: P275445

Luminaire Tested: **14CZ2-44-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275445  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3947.0 lumens  
Efficiency: N/A  
Efficacy: 108.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

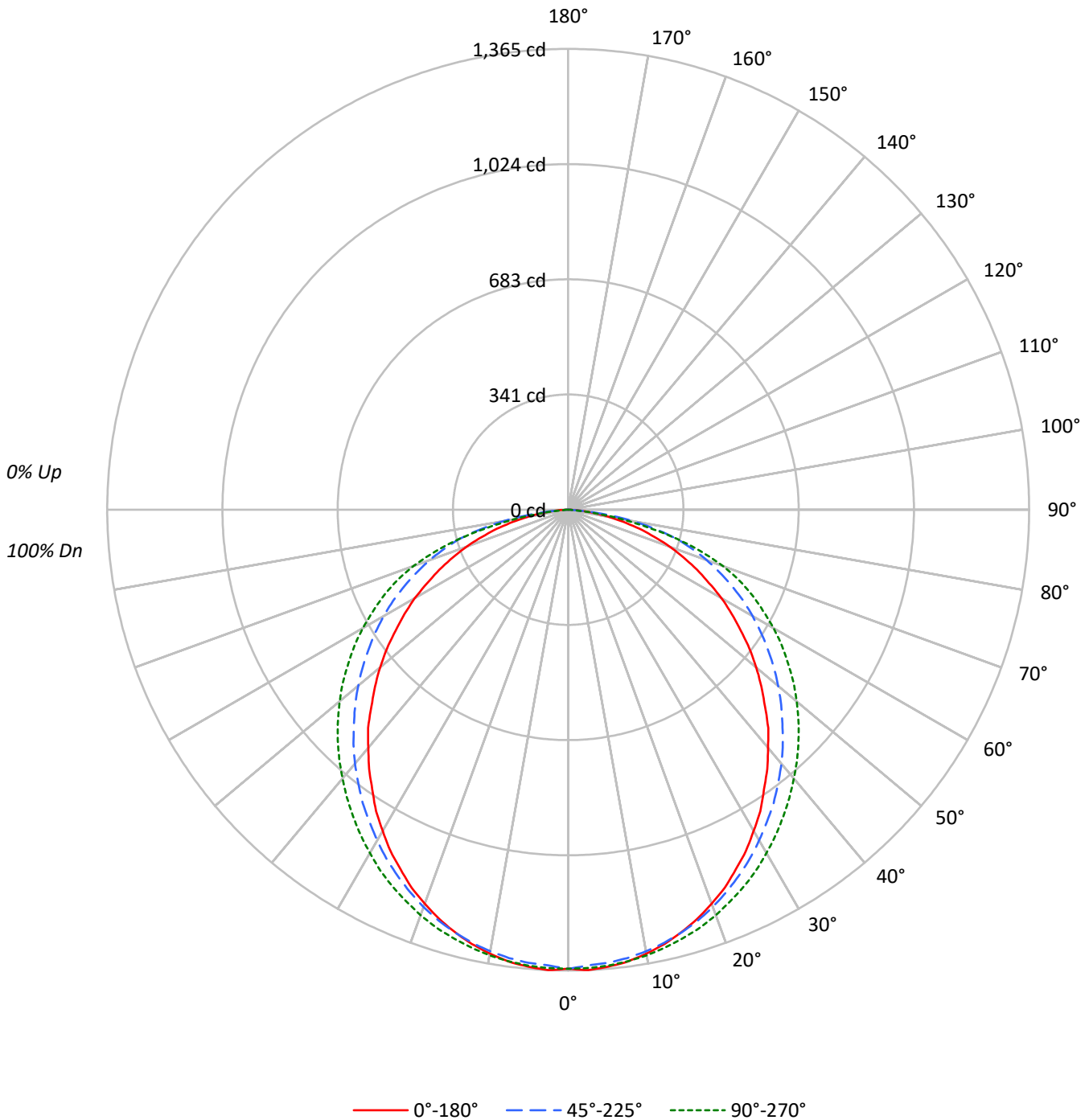
Input Watts (W): 36.549  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3659	3659	3659
5°	3671	3640	3661
10°	3648	3629	3663
15°	3609	3612	3661
20°	3556	3586	3659
25°	3488	3551	3656
30°	3413	3514	3648
35°	3322	3484	3646
40°	3234	3450	3651
45°	3135	3413	3671
50°	3044	3397	3695
55°	2928	3386	3728
60°	2823	3392	3780
65°	2679	3401	3839
70°	2514	3427	3836
75°	2278	3459	3468
80°	1869	2986	2469
85°	1386	1414	571



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.7	3.3
10°-20°	367.6	9.3
20°-30°	553.7	14.0
30°-40°	664.4	16.8
40°-50°	692.5	17.5
50°-60°	641.1	16.2
60°-70°	518.0	13.1
70°-80°	315.8	8.0
80°-90°	65.2	1.7
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°	1049.9	26.6
0°-40°	1714.3	43.4
0°-60°	3048.0	77.2
0°-90°	3947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3947.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1359	1355	1347	1357	1355	129
15°	1296	1296	1296	1314	1314	365
25°	1175	1182	1196	1226	1231	542
35°	1011	1027	1060	1099	1110	633
45°	824	848	897	947	965	637
55°	624	657	722	778	795	559
65°	421	462	534	588	603	416
75°	219	268	333	338	334	230
85°	45	67	46	26	18	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1359.8	1359.8	1359.8	1359.8	1359.8
2.5°	1365.0	1360.6	1351.0	1360.6	1358.9
5°	1358.9	1355.4	1347.4	1357.1	1355.4
7.5°	1350.1	1346.6	1339.5	1351.0	1349.2
10°	1335.1	1333.4	1328.1	1341.3	1340.4
12.5°	1317.5	1316.6	1314.0	1329.0	1328.1
15°	1295.5	1296.4	1296.4	1314.0	1314.0
17.5°	1270.9	1272.6	1276.1	1295.5	1298.1
20°	1241.8	1245.3	1252.4	1274.4	1277.9
22.5°	1211.9	1214.5	1225.1	1251.5	1255.0
25°	1174.9	1182.0	1196.1	1226.0	1231.3
27.5°	1139.7	1145.9	1165.3	1196.1	1204.9
30°	1098.4	1108.0	1130.9	1164.4	1174.1
32.5°	1058.8	1069.3	1095.7	1134.4	1143.2
35°	1011.2	1027.1	1060.5	1099.2	1109.8
37.5°	968.1	983.1	1020.9	1063.2	1075.5
40°	920.6	939.1	982.2	1027.1	1039.4
42.5°	876.6	894.2	940.8	986.6	1003.3
45°	823.8	848.4	896.8	947.0	964.6
47.5°	775.4	800.0	855.5	909.1	925.0
50°	727.0	753.4	811.5	866.9	882.7
52.5°	676.8	705.0	767.4	822.9	841.4
55°	624.0	656.6	721.7	778.0	794.7
57.5°	573.8	607.3	676.8	734.0	750.7
60°	524.5	558.9	630.2	684.7	702.3
62.5°	470.0	510.5	584.4	638.1	651.3
65°	420.7	462.1	534.2	587.9	602.9
67.5°	368.8	413.6	485.8	535.1	549.2
70°	319.5	366.1	435.6	481.4	487.6
72.5°	266.7	314.2	384.6	413.6	413.6
75°	219.1	267.6	332.7	338.0	333.6
77.5°	167.2	220.9	263.1	252.6	242.0
80°	120.6	173.4	192.7	173.4	159.3
82.5°	81.0	125.9	116.2	92.4	81.8
85°	44.9	66.9	45.8	25.5	18.5
87.5°	16.7	15.0	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)