

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: P276027

Luminaire Tested: **24CZ2-40-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276027  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2979.3 lumens  
Efficiency: N/A  
Efficacy: 95.8 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

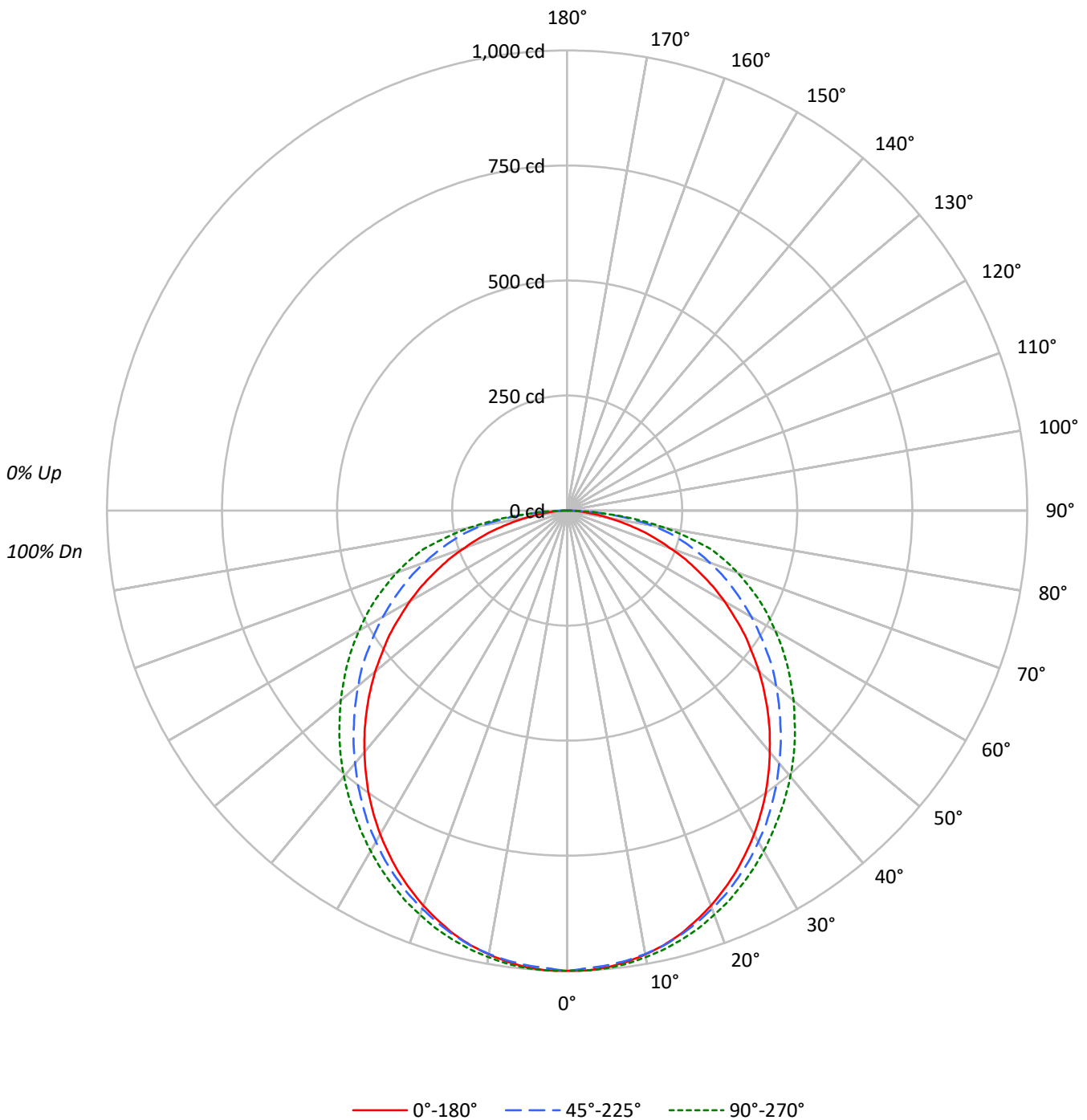
Input Watts (W): 31.110453  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1346	1346	1346
5°	1346	1340	1348
10°	1338	1337	1346
15°	1327	1330	1344
20°	1308	1318	1338
25°	1287	1306	1333
30°	1262	1291	1327
35°	1235	1276	1323
40°	1203	1259	1326
45°	1173	1247	1332
50°	1141	1240	1344
55°	1106	1239	1369
60°	1062	1244	1405
65°	1007	1263	1466
70°	935	1295	1549
75°	853	1359	1680
80°	701	1464	1680
85°	537	1351	1443



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.6	3.2
10°-20°	270.1	9.1
20°-30°	406.4	13.6
30°-40°	487.1	16.3
40°-50°	507.6	17.0
50°-60°	472.2	15.9
60°-70°	388.9	13.1
70°-80°	264.9	8.9
80°-90°	87.4	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°	771.1	25.9
0°-40°	1258.2	42.2
0°-60°	2238.0	75.1
0°-90°	2979.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2979.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1000	1000	1000	1000	1000	
5°	996	996	992	997	998	95
15°	953	954	954	964	964	268
25°	867	871	880	895	898	399
35°	752	761	777	797	805	470
45°	616	629	655	688	700	475
55°	471	487	528	570	584	420
65°	316	343	397	444	460	314
75°	164	201	262	308	323	173
85°	35	68	88	94	94	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1000.3	1000.3	1000.3	1000.3	1000.3
2.5°	1000.3	1000.3	995.3	1000.3	1000.3
5°	996.3	996.3	992.3	997.3	998.3
7.5°	989.3	990.3	986.4	992.3	993.3
10°	979.4	980.4	978.4	984.4	985.4
12.5°	967.5	968.5	968.5	975.4	976.4
15°	952.6	953.5	954.5	963.5	964.5
17.5°	933.7	936.6	938.6	949.6	951.6
20°	913.8	916.8	920.7	932.7	934.7
22.5°	890.9	894.9	901.8	914.8	917.8
25°	867.0	871.0	880.0	894.9	897.9
27.5°	840.2	846.2	857.1	873.0	877.0
30°	812.4	818.3	831.2	848.2	854.1
32.5°	782.5	790.5	805.4	824.3	830.3
35°	751.7	760.7	776.6	797.4	805.4
37.5°	718.9	728.8	747.7	770.6	780.5
40°	685.1	697.0	716.9	743.7	754.7
42.5°	651.3	662.2	687.1	715.9	727.8
45°	616.5	629.4	655.3	688.1	700.0
47.5°	580.7	593.6	624.4	659.2	670.2
50°	544.9	557.8	592.6	629.4	642.3
52.5°	506.1	523.0	562.8	599.6	612.5
55°	471.3	487.2	528.0	569.7	583.7
57.5°	431.5	450.4	495.2	538.9	553.8
60°	394.7	414.6	462.4	507.1	522.0
62.5°	357.0	378.8	429.5	475.3	492.2
65°	316.2	343.0	396.7	443.5	460.4
67.5°	279.4	307.2	363.9	411.6	426.6
70°	237.6	271.4	329.1	376.8	393.7
72.5°	201.8	235.7	296.3	343.0	359.9
75°	164.1	200.9	261.5	308.2	323.2
77.5°	126.3	167.0	227.7	263.5	268.5
80°	90.5	133.2	188.9	209.8	216.8
82.5°	63.6	102.4	139.2	153.1	157.1
85°	34.8	67.6	87.5	93.5	93.5
87.5°	14.9	28.8	34.8	35.8	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)