

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: P276290

Luminaire Tested: **24CZ2-40-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276290  
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-L92765-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3539.9 lumens  
Efficiency: N/A  
Efficacy: 113.6 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

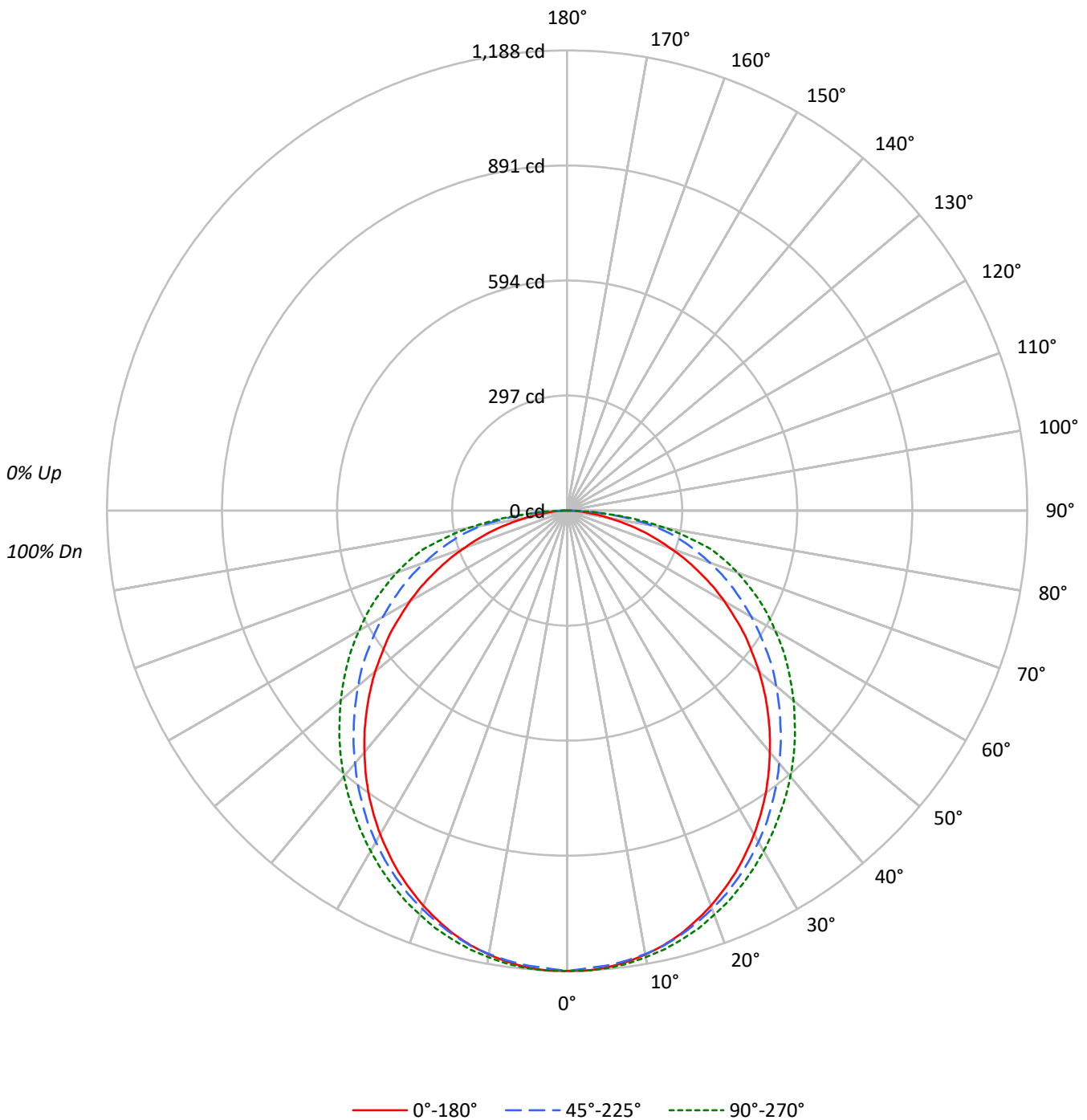
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1599	1599	1599
5°	1599	1593	1602
10°	1590	1588	1600
15°	1577	1580	1596
20°	1555	1566	1590
25°	1529	1552	1584
30°	1500	1535	1577
35°	1467	1516	1572
40°	1430	1496	1575
45°	1394	1482	1583
50°	1355	1474	1598
55°	1314	1472	1627
60°	1262	1478	1669
65°	1196	1501	1741
70°	1111	1539	1840
75°	1013	1615	1996
80°	833	1740	1996
85°	639	1606	1715



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.4	3.2
10°-20°	320.9	9.1
20°-30°	482.9	13.6
30°-40°	578.7	16.3
40°-50°	603.1	17.0
50°-60°	561.1	15.9
60°-70°	462.1	13.1
70°-80°	314.7	8.9
80°-90°	103.9	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°	916.2	25.9
0°-40°	1495.0	42.2
0°-60°	2659.1	75.1
0°-90°	3539.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3539.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1184	1184	1179	1185	1186	112
15°	1132	1133	1134	1145	1146	319
25°	1030	1035	1046	1063	1067	474
35°	893	904	923	948	957	558
45°	732	748	779	818	832	565
55°	560	579	627	677	694	499
65°	376	408	471	527	547	373
75°	195	239	311	366	384	206
85°	41	80	104	111	111	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1188.5	1188.5	1188.5	1188.5	1188.5
2.5°	1188.5	1188.5	1182.6	1188.5	1188.5
5°	1183.8	1183.8	1179.1	1185.0	1186.2
7.5°	1175.5	1176.7	1172.0	1179.1	1180.2
10°	1163.7	1164.9	1162.5	1169.6	1170.8
12.5°	1149.5	1150.7	1150.7	1159.0	1160.2
15°	1131.8	1133.0	1134.2	1144.8	1146.0
17.5°	1109.4	1112.9	1115.3	1128.3	1130.6
20°	1085.7	1089.3	1094.0	1108.2	1110.5
22.5°	1058.6	1063.3	1071.6	1086.9	1090.5
25°	1030.2	1034.9	1045.6	1063.3	1066.8
27.5°	998.3	1005.4	1018.4	1037.3	1042.0
30°	965.2	972.3	987.7	1007.8	1014.8
32.5°	929.8	939.2	957.0	979.4	986.5
35°	893.2	903.8	922.7	947.5	957.0
37.5°	854.2	866.0	888.4	915.6	927.4
40°	814.0	828.2	851.8	883.7	896.7
42.5°	773.8	786.8	816.4	850.6	864.8
45°	732.5	747.8	778.6	817.6	831.7
47.5°	690.0	705.3	741.9	783.3	796.3
50°	647.4	662.8	704.1	747.8	763.2
52.5°	601.3	621.4	668.7	712.4	727.8
55°	560.0	578.9	627.3	677.0	693.5
57.5°	512.7	535.2	588.4	640.3	658.1
60°	469.0	492.7	549.4	602.5	620.3
62.5°	424.1	450.1	510.4	564.7	584.8
65°	375.7	407.6	471.4	526.9	547.0
67.5°	332.0	365.1	432.4	489.1	506.8
70°	282.4	322.5	391.1	447.8	467.8
72.5°	239.8	280.0	352.1	407.6	427.7
75°	194.9	238.6	310.7	366.2	384.0
77.5°	150.0	198.5	270.5	313.1	319.0
80°	107.5	158.3	224.5	249.3	257.6
82.5°	75.6	121.7	165.4	181.9	186.7
85°	41.4	80.3	104.0	111.1	111.1
87.5°	17.7	34.3	41.4	42.5	43.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)