

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: P276200

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276200
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: 24CZ2-40HE-UNV-L92765-W2A1-U-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3561.7 lumens
Efficiency: N/A
Efficacy: 123.1 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

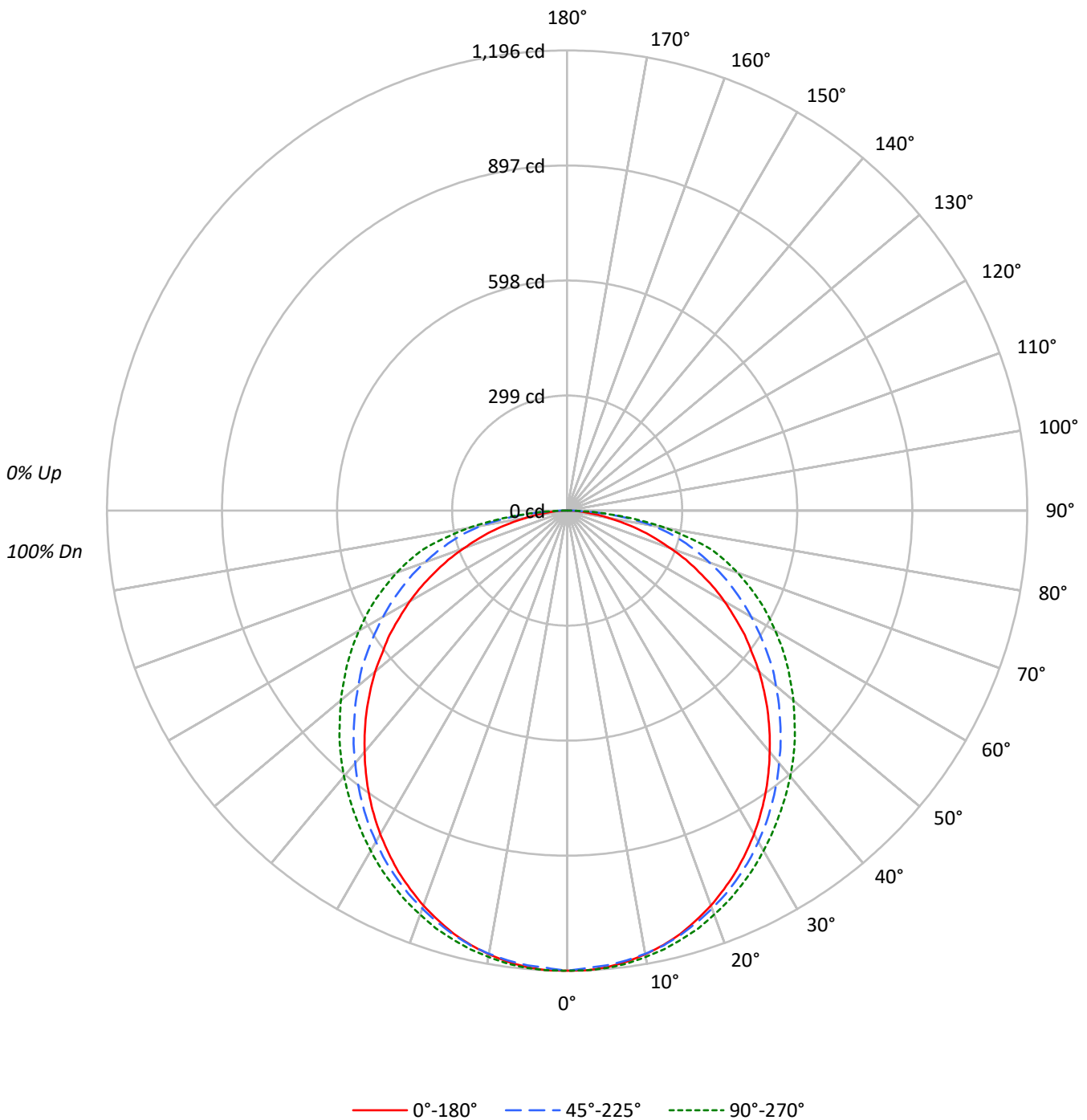
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1609	1609	1609
5°	1609	1602	1612
10°	1600	1598	1609
15°	1586	1589	1606
20°	1564	1576	1600
25°	1539	1562	1594
30°	1509	1544	1586
35°	1476	1525	1581
40°	1439	1505	1585
45°	1402	1490	1592
50°	1364	1483	1607
55°	1322	1481	1637
60°	1270	1487	1679
65°	1203	1510	1752
70°	1118	1548	1852
75°	1019	1625	2008
80°	838	1750	2008
85°	642	1615	1724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.1	3.2
10°-20°	322.9	9.1
20°-30°	485.9	13.6
30°-40°	582.3	16.3
40°-50°	606.8	17.0
50°-60°	564.6	15.9
60°-70°	465.0	13.1
70°-80°	316.7	8.9
80°-90°	104.5	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°	921.9	25.9
0°-40°	1504.1	42.2
0°-60°	2675.5	75.1
0°-90°	3561.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3561.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1191	1191	1186	1192	1193	113
15°	1139	1140	1141	1152	1153	321
25°	1036	1041	1052	1070	1073	477
35°	899	909	928	953	963	562
45°	737	752	783	823	837	568
55°	563	582	631	681	698	502
65°	378	410	474	530	550	375
75°	196	240	313	368	386	207
85°	42	81	105	112	112	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1195.8	1195.8	1195.8	1195.8	1195.8
2.5°	1195.8	1195.8	1189.9	1195.8	1195.8
5°	1191.1	1191.1	1186.3	1192.3	1193.4
7.5°	1182.7	1183.9	1179.2	1186.3	1187.5
10°	1170.9	1172.1	1169.7	1176.8	1178.0
12.5°	1156.6	1157.8	1157.8	1166.1	1167.3
15°	1138.8	1140.0	1141.1	1151.8	1153.0
17.5°	1116.2	1119.7	1122.1	1135.2	1137.6
20°	1092.4	1096.0	1100.7	1115.0	1117.4
22.5°	1065.1	1069.8	1078.1	1093.6	1097.2
25°	1036.5	1041.3	1052.0	1069.8	1073.4
27.5°	1004.4	1011.6	1024.7	1043.7	1048.4
30°	971.2	978.3	993.7	1014.0	1021.1
32.5°	935.5	945.0	962.8	985.4	992.6
35°	898.7	909.4	928.4	953.3	962.8
37.5°	859.4	871.3	893.9	921.2	933.1
40°	819.0	833.3	857.0	889.1	902.2
42.5°	778.6	791.7	821.4	855.9	870.1
45°	737.0	752.4	783.3	822.6	836.8
47.5°	694.2	709.6	746.5	788.1	801.2
50°	651.4	666.9	708.5	752.4	767.9
52.5°	605.0	625.3	672.8	716.8	732.2
55°	563.4	582.5	631.2	681.1	697.8
57.5°	515.9	538.5	592.0	644.3	662.1
60°	471.9	495.7	552.7	606.2	624.1
62.5°	426.7	452.9	513.5	568.2	588.4
65°	378.0	410.1	474.3	530.2	550.4
67.5°	334.0	367.3	435.1	492.1	509.9
70°	284.1	324.5	393.5	450.5	470.7
72.5°	241.3	281.7	354.2	410.1	430.3
75°	196.1	240.1	312.6	368.5	386.3
77.5°	151.0	199.7	272.2	315.0	320.9
80°	108.2	159.3	225.9	250.8	259.1
82.5°	76.1	122.4	166.4	183.1	187.8
85°	41.6	80.8	104.6	111.7	111.7
87.5°	17.8	34.5	41.6	42.8	44.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)