

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: P276483

Luminaire Tested: **24CZ2-40HE-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276483
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40HE-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4041.6 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

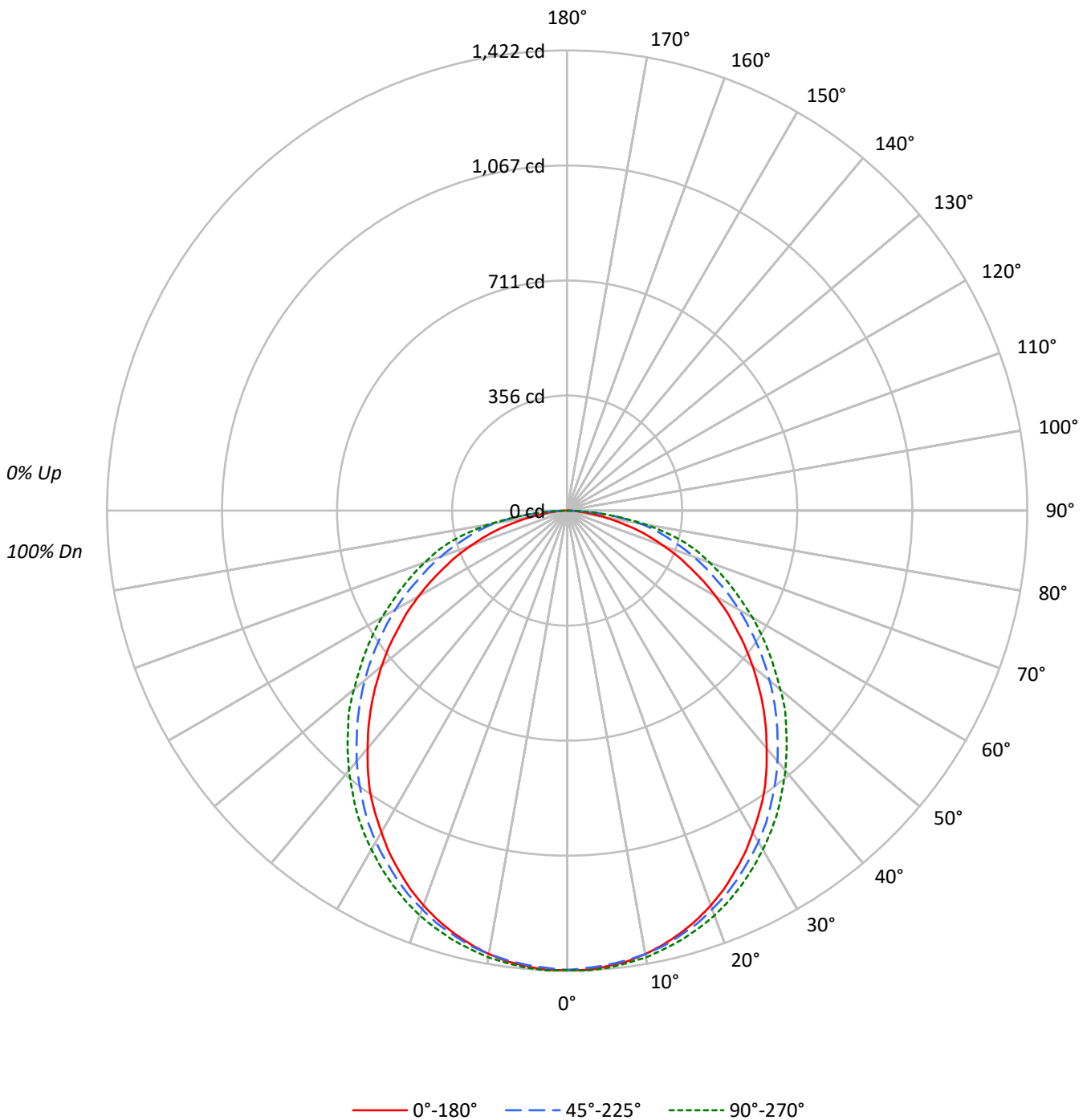
Input Watts (W): 28.644
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1910	1910	1910
5°	1909	1904	1916
10°	1901	1901	1915
15°	1883	1892	1912
20°	1858	1877	1906
25°	1824	1858	1894
30°	1783	1837	1879
35°	1744	1807	1864
40°	1684	1777	1842
45°	1629	1742	1822
50°	1567	1709	1800
55°	1497	1677	1783
60°	1427	1651	1779
65°	1337	1623	1790
70°	1237	1631	1838
75°	1108	1662	1942
80°	895	1760	1900
85°	673	1545	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.4	3.3
10°-20°	384.1	9.5
20°-30°	577.4	14.3
30°-40°	687.7	17.0
40°-50°	703.8	17.4
50°-60°	633.7	15.7
60°-70°	497.6	12.3
70°-80°	323.0	8.0
80°-90°	99.9	2.5
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°	1095.9	27.1
0°-40°	1783.6	44.1
0°-60°	3121.1	77.2
0°-90°	4041.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4041.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1413	1416	1410	1417	1419	134
15°	1352	1356	1358	1370	1372	381
25°	1229	1239	1252	1272	1276	566
35°	1062	1074	1100	1127	1135	662
45°	856	877	915	950	958	660
55°	638	666	715	752	760	572
65°	420	452	510	552	562	418
75°	213	254	320	363	374	226
85°	44	81	100	98	98	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1421.1	1421.1	1414.7	1421.1	1422.4
5°	1413.4	1416.0	1409.6	1417.3	1418.6
7.5°	1405.7	1405.7	1401.9	1409.6	1410.8
10°	1391.6	1392.9	1391.6	1400.6	1401.9
12.5°	1373.6	1376.2	1377.5	1386.5	1387.7
15°	1351.8	1355.6	1358.2	1369.8	1372.3
17.5°	1327.4	1331.3	1337.7	1350.5	1353.1
20°	1297.9	1303.0	1310.7	1327.4	1331.3
22.5°	1265.8	1270.9	1283.8	1299.2	1305.6
25°	1228.6	1238.8	1251.7	1272.2	1276.1
27.5°	1191.3	1200.3	1217.0	1238.8	1244.0
30°	1147.7	1161.8	1182.3	1204.2	1209.3
32.5°	1105.3	1119.4	1143.8	1166.9	1173.4
35°	1061.7	1074.5	1100.2	1127.1	1134.8
37.5°	1011.6	1028.3	1056.5	1083.5	1091.2
40°	959.0	979.5	1011.6	1039.8	1048.8
42.5°	908.9	930.7	962.8	993.6	1003.9
45°	856.3	876.8	915.3	950.0	957.7
47.5°	802.3	825.5	866.5	901.2	914.0
50°	748.4	772.8	816.5	852.4	860.1
52.5°	694.5	720.2	766.4	804.9	808.8
55°	638.0	666.3	715.1	752.3	760.0
57.5°	586.7	611.1	663.7	702.2	711.2
60°	530.2	557.1	613.6	649.6	661.1
62.5°	476.3	504.5	563.6	599.5	609.8
65°	419.8	451.9	509.7	552.0	562.3
67.5°	371.0	401.8	463.4	504.5	514.8
70°	314.5	349.2	414.7	457.0	467.3
72.5°	265.7	301.7	367.2	408.2	423.6
75°	213.1	254.2	319.7	363.3	373.6
77.5°	161.8	209.3	276.0	309.4	309.4
80°	115.5	165.6	227.2	242.6	245.2
82.5°	75.7	124.5	168.2	166.9	166.9
85°	43.6	80.9	100.1	97.6	97.6
87.5°	16.7	33.4	35.9	35.9	34.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)