

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: P276485

Luminaire Tested: **24CZ2-40HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276485
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-5000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4168.8 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

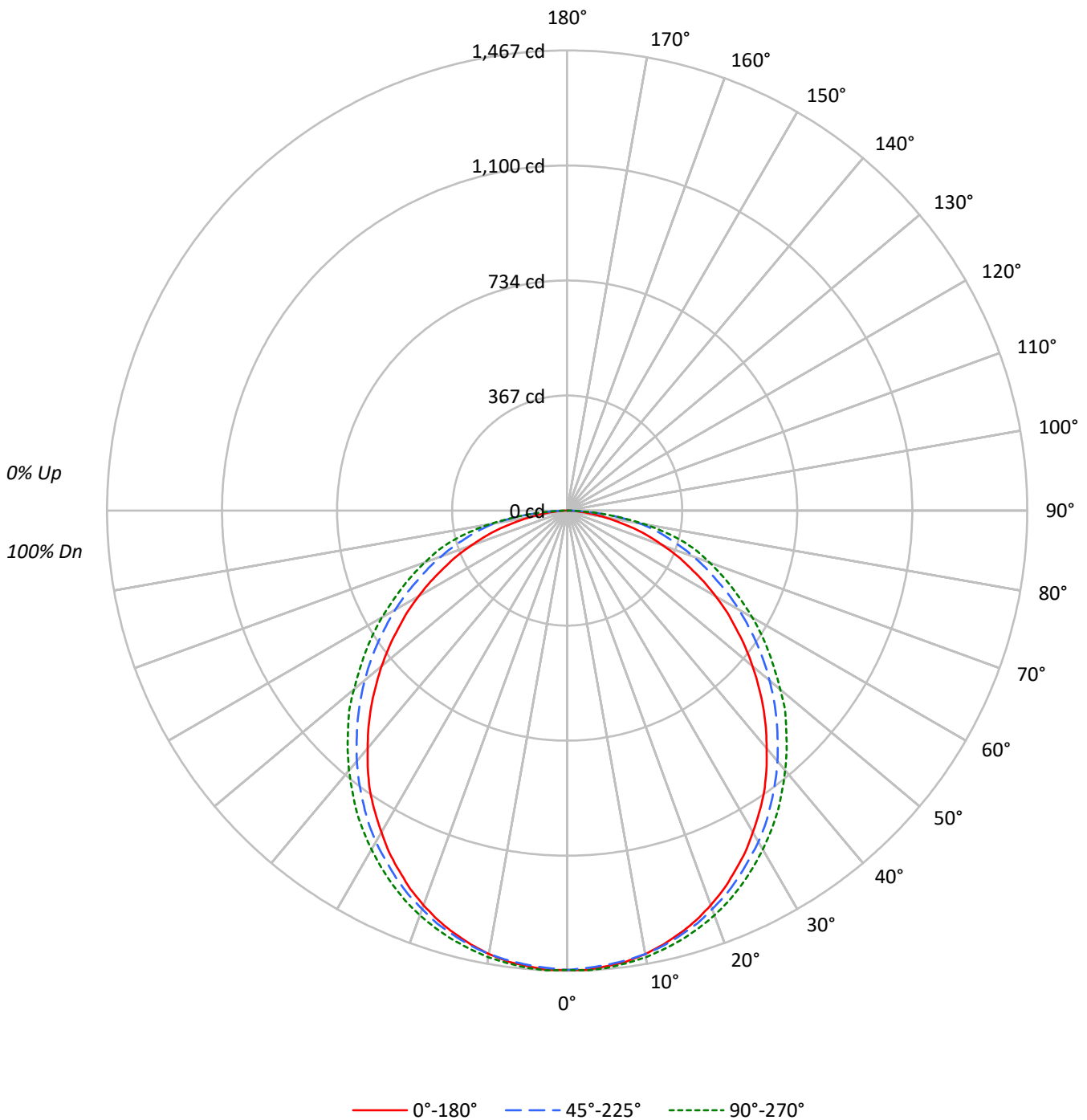
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P276485

CATALOG NUMBER: 24CZ2-40HE-S-UNV-L82765-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P276485

CATALOG NUMBER: 24CZ2-40HE-S-UNV-L82765-W2A1-U-5000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1970	1970	1970
5°	1969	1964	1976
10°	1961	1961	1976
15°	1942	1952	1972
20°	1917	1936	1966
25°	1881	1917	1954
30°	1839	1895	1938
35°	1799	1864	1923
40°	1737	1833	1900
45°	1681	1796	1880
50°	1616	1763	1857
55°	1544	1730	1839
60°	1472	1703	1835
65°	1379	1674	1847
70°	1276	1683	1896
75°	1143	1714	2003
80°	924	1816	1960
85°	695	1595	1553



TEST NUMBER: P276485

CATALOG NUMBER: 24CZ2-40HE-S-UNV-L82765-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.6	3.3
10°-20°	396.2	9.5
20°-30°	595.5	14.3
30°-40°	709.4	17.0
40°-50°	726.0	17.4
50°-60°	653.6	15.7
60°-70°	513.3	12.3
70°-80°	333.1	8.0
80°-90°	103.0	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°	1130.3	27.1
0°-40°	1839.7	44.1
0°-60°	3219.3	77.2
0°-90°	4168.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4168.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1458	1461	1454	1462	1463	139
15°	1394	1398	1401	1413	1416	393
25°	1267	1278	1291	1312	1316	584
35°	1095	1108	1135	1163	1171	683
45°	883	904	944	980	988	681
55°	658	687	738	776	784	590
65°	433	466	526	569	580	431
75°	220	262	330	375	385	233
85°	45	83	103	101	101	54
90°	0	0	0	0	0	



TEST NUMBER: P276485

CATALOG NUMBER: 24CZ2-40HE-S-UNV-L82765-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1464.5	1464.5	1464.5	1464.5	1464.5
2.5°	1465.9	1465.9	1459.2	1465.9	1467.2
5°	1457.9	1460.6	1453.9	1461.9	1463.2
7.5°	1450.0	1450.0	1446.0	1453.9	1455.3
10°	1435.4	1436.7	1435.4	1444.7	1446.0
12.5°	1416.9	1419.5	1420.8	1430.1	1431.4
15°	1394.4	1398.3	1401.0	1412.9	1415.5
17.5°	1369.2	1373.2	1379.8	1393.0	1395.7
20°	1338.7	1344.0	1352.0	1369.2	1373.2
22.5°	1305.6	1310.9	1324.2	1340.1	1346.7
25°	1267.2	1277.8	1291.1	1312.3	1316.2
27.5°	1228.8	1238.1	1255.3	1277.8	1283.1
30°	1183.8	1198.4	1219.6	1242.1	1247.4
32.5°	1140.1	1154.7	1179.8	1203.7	1210.3
35°	1095.1	1108.3	1134.8	1162.6	1170.6
37.5°	1043.4	1060.7	1089.8	1117.6	1125.5
40°	989.2	1010.3	1043.4	1072.6	1081.8
42.5°	937.5	960.0	993.1	1024.9	1035.5
45°	883.2	904.4	944.1	979.9	987.8
47.5°	827.6	851.4	893.8	929.6	942.8
50°	772.0	797.1	842.2	879.2	887.2
52.5°	716.4	742.9	790.5	830.3	834.2
55°	658.1	687.2	737.6	776.0	783.9
57.5°	605.1	630.3	684.6	724.3	733.6
60°	546.9	574.7	633.0	670.0	681.9
62.5°	491.3	520.4	581.3	618.4	629.0
65°	433.0	466.1	525.7	569.4	580.0
67.5°	382.7	414.5	478.0	520.4	531.0
70°	324.4	360.2	427.7	471.4	482.0
72.5°	274.1	311.2	378.7	421.1	437.0
75°	219.8	262.2	329.7	374.7	385.3
77.5°	166.8	215.8	284.7	319.1	319.1
80°	119.2	170.8	234.4	250.3	252.9
82.5°	78.1	128.4	173.5	172.1	172.1
85°	45.0	83.4	103.3	100.6	100.6
87.5°	17.2	34.4	37.1	37.1	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)