

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: P276502

Luminaire Tested: **24CZ2-50HE-S-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276502
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: 24CZ2-50HE-S-UNV-L82765-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5075.3 lumens
Efficiency: N/A
Efficacy: 139.6 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

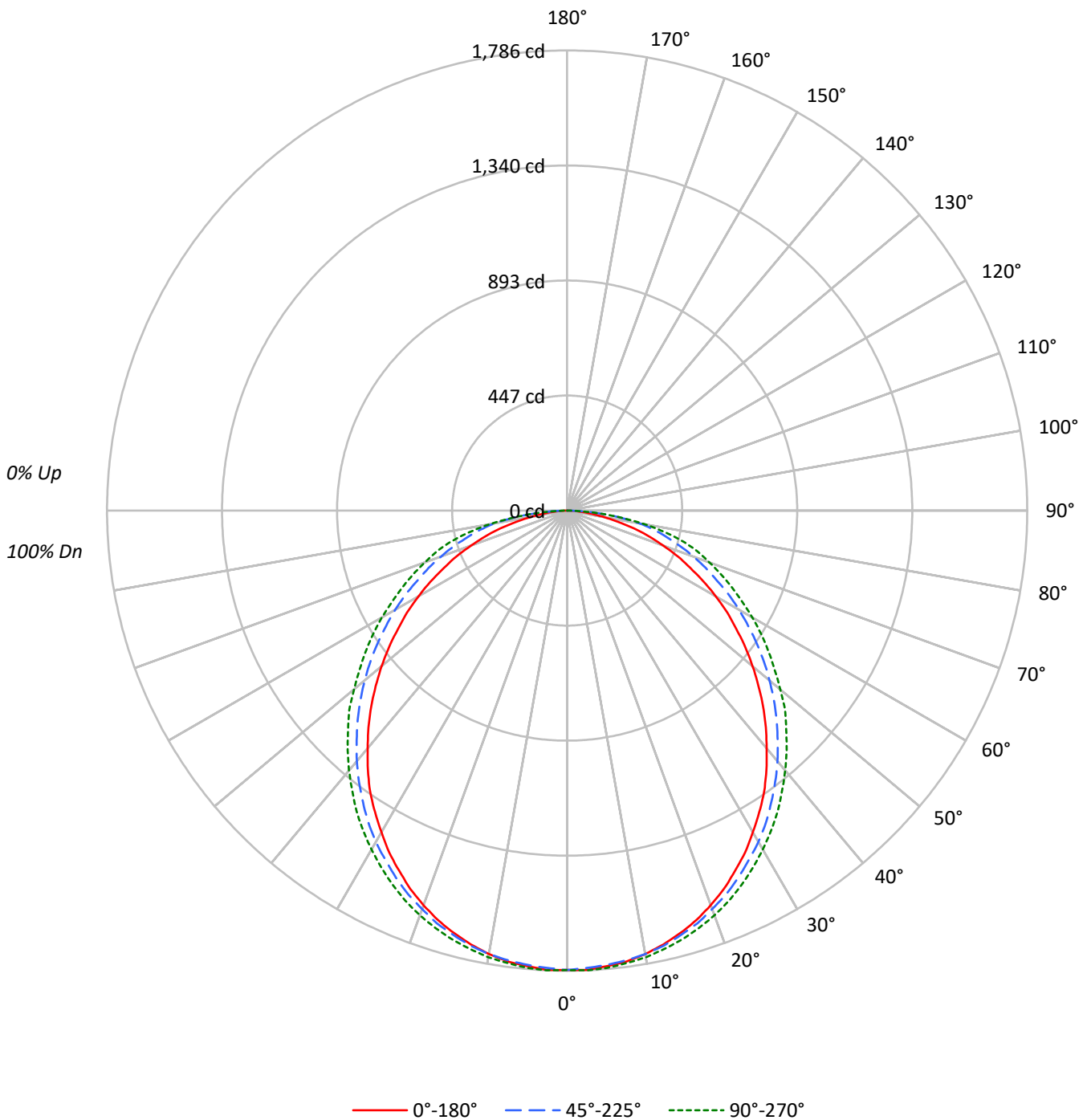
Input Watts (W): 36.363
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2399	2399	2399
5°	2397	2391	2406
10°	2388	2388	2405
15°	2365	2376	2401
20°	2334	2357	2394
25°	2290	2333	2379
30°	2239	2307	2359
35°	2190	2269	2341
40°	2115	2231	2313
45°	2046	2187	2288
50°	1967	2146	2261
55°	1879	2106	2239
60°	1792	2074	2234
65°	1678	2038	2248
70°	1554	2048	2308
75°	1391	2087	2439
80°	1124	2211	2386
85°	846	1941	1891



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.8	3.3
10°-20°	482.3	9.5
20°-30°	725.0	14.3
30°-40°	863.6	17.0
40°-50°	883.9	17.4
50°-60°	795.7	15.7
60°-70°	624.9	12.3
70°-80°	405.6	8.0
80°-90°	125.4	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°	1376.1	27.1
0°-40°	2239.8	44.1
0°-60°	3919.4	77.2
0°-90°	5075.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5075.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1783	1783	1783	1783	1783	
5°	1775	1778	1770	1780	1781	169
15°	1698	1702	1706	1720	1723	479
25°	1543	1556	1572	1598	1602	711
35°	1333	1349	1382	1415	1425	832
45°	1075	1101	1149	1193	1203	829
55°	801	837	898	945	954	718
65°	527	568	640	693	706	525
75°	268	319	401	456	469	283
85°	55	102	126	122	122	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1783.0	1783.0	1783.0	1783.0	1783.0
2.5°	1784.6	1784.6	1776.5	1784.6	1786.2
5°	1774.9	1778.2	1770.1	1779.8	1781.4
7.5°	1765.3	1765.3	1760.4	1770.1	1771.7
10°	1747.5	1749.1	1747.5	1758.8	1760.4
12.5°	1725.0	1728.2	1729.8	1741.1	1742.7
15°	1697.6	1702.4	1705.6	1720.1	1723.4
17.5°	1666.9	1671.8	1679.8	1695.9	1699.2
20°	1629.8	1636.3	1646.0	1666.9	1671.8
22.5°	1589.5	1596.0	1612.1	1631.5	1639.5
25°	1542.8	1555.7	1571.8	1597.6	1602.4
27.5°	1496.0	1507.3	1528.3	1555.7	1562.1
30°	1441.2	1459.0	1484.8	1512.2	1518.6
32.5°	1388.0	1405.8	1436.4	1465.4	1473.5
35°	1333.2	1349.3	1381.6	1415.4	1425.1
37.5°	1270.3	1291.3	1326.8	1360.6	1370.3
40°	1204.2	1230.0	1270.3	1305.8	1317.1
42.5°	1141.4	1168.8	1209.1	1247.8	1260.7
45°	1075.3	1101.1	1149.4	1193.0	1202.6
47.5°	1007.6	1036.6	1088.2	1131.7	1147.8
50°	939.9	970.5	1025.3	1070.4	1080.1
52.5°	872.2	904.4	962.4	1010.8	1015.6
55°	801.2	836.7	897.9	944.7	954.4
57.5°	736.7	767.4	833.5	881.8	893.1
60°	665.8	699.7	770.6	815.7	830.2
62.5°	598.1	633.6	707.7	752.9	765.8
65°	527.2	567.5	640.0	693.2	706.1
67.5°	465.9	504.6	582.0	633.6	646.5
70°	395.0	438.5	520.7	573.9	586.8
72.5°	333.7	378.8	461.1	512.7	532.0
75°	267.6	319.2	401.4	456.2	469.1
77.5°	203.1	262.8	346.6	388.5	388.5
80°	145.1	208.0	285.3	304.7	307.9
82.5°	95.1	156.4	211.2	209.6	209.6
85°	54.8	101.6	125.7	122.5	122.5
87.5°	21.0	41.9	45.1	45.1	43.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)