

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: P276504

Luminaire Tested: **24CZ2-50HE-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276504
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-5500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5194.8 lumens
Efficiency: N/A
Efficacy: 141.4 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

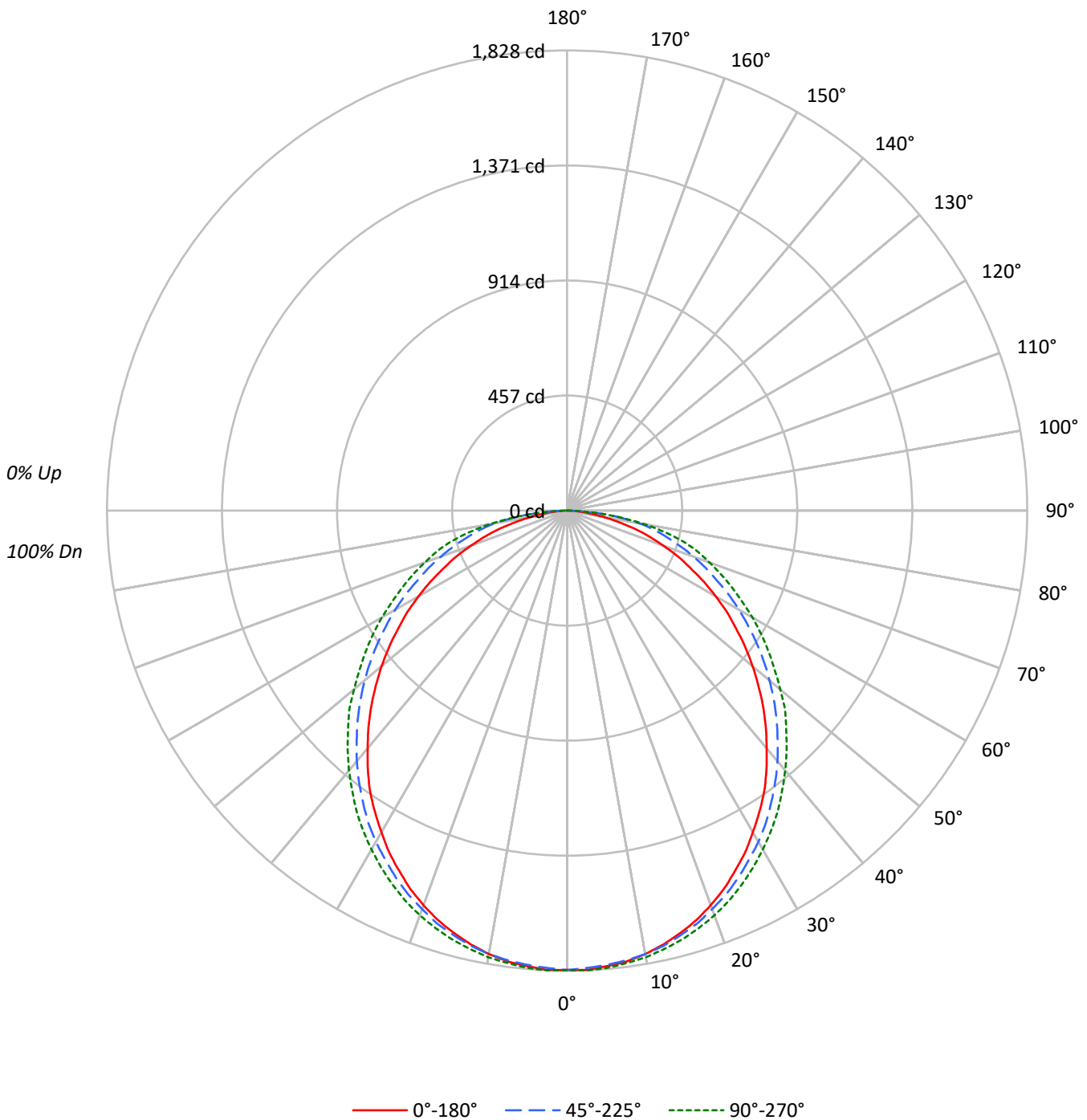
Input Watts (W): 36.735
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2455	2455	2455
5°	2454	2447	2463
10°	2444	2444	2462
15°	2420	2432	2457
20°	2389	2412	2450
25°	2344	2388	2435
30°	2292	2361	2415
35°	2241	2323	2396
40°	2165	2284	2368
45°	2094	2239	2342
50°	2014	2197	2314
55°	1924	2156	2291
60°	1834	2122	2287
65°	1718	2086	2301
70°	1590	2097	2363
75°	1424	2136	2496
80°	1151	2263	2442
85°	866	1987	1936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.8	3.3
10°-20°	493.7	9.5
20°-30°	742.1	14.3
30°-40°	883.9	17.0
40°-50°	904.7	17.4
50°-60°	814.5	15.7
60°-70°	639.6	12.3
70°-80°	415.1	8.0
80°-90°	128.4	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°	1408.5	27.1
0°-40°	2292.4	44.1
0°-60°	4011.6	77.2
0°-90°	5194.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5194.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1825	1825	1825	1825	1825	
5°	1817	1820	1812	1822	1823	173
15°	1738	1742	1746	1761	1764	490
25°	1579	1592	1609	1635	1640	727
35°	1365	1381	1414	1449	1459	851
45°	1101	1127	1176	1221	1231	849
55°	820	856	919	967	977	735
65°	540	581	655	710	723	537
75°	274	327	411	467	480	290
85°	56	104	129	125	125	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1824.9	1824.9	1824.9	1824.9	1824.9
2.5°	1826.6	1826.6	1818.3	1826.6	1828.2
5°	1816.7	1820.0	1811.7	1821.6	1823.3
7.5°	1806.8	1806.8	1801.8	1811.7	1813.4
10°	1788.6	1790.3	1788.6	1800.2	1801.8
12.5°	1765.5	1768.8	1770.5	1782.0	1783.7
15°	1737.5	1742.4	1745.7	1760.6	1763.9
17.5°	1706.1	1711.1	1719.3	1735.8	1739.1
20°	1668.2	1674.8	1684.7	1706.1	1711.1
22.5°	1626.9	1633.5	1650.0	1669.8	1678.1
25°	1579.1	1592.3	1608.8	1635.2	1640.1
27.5°	1531.2	1542.8	1564.2	1592.3	1598.9
30°	1475.1	1493.3	1519.7	1547.7	1554.3
32.5°	1420.7	1438.8	1470.2	1499.9	1508.1
35°	1364.6	1381.1	1414.1	1448.7	1458.6
37.5°	1300.2	1321.7	1358.0	1392.6	1402.5
40°	1232.6	1259.0	1300.2	1336.5	1348.1
42.5°	1168.2	1196.3	1237.5	1277.1	1290.3
45°	1100.6	1127.0	1176.5	1221.0	1230.9
47.5°	1031.3	1061.0	1113.8	1158.3	1174.8
50°	962.0	993.3	1049.4	1095.6	1105.5
52.5°	892.7	925.7	985.1	1034.6	1039.5
55°	820.1	856.4	919.1	966.9	976.8
57.5°	754.1	785.4	853.1	902.6	914.1
60°	681.5	716.1	788.7	834.9	849.8
62.5°	612.2	648.5	724.4	770.6	783.8
65°	539.6	580.8	655.1	709.5	722.7
67.5°	476.9	516.5	595.7	648.5	661.7
70°	404.3	448.8	533.0	587.4	600.6
72.5°	341.6	387.8	471.9	524.7	544.5
75°	273.9	326.7	410.9	467.0	480.2
77.5°	207.9	269.0	354.8	397.7	397.7
80°	148.5	212.9	292.1	311.9	315.2
82.5°	97.4	160.1	216.2	214.5	214.5
85°	56.1	104.0	128.7	125.4	125.4
87.5°	21.5	42.9	46.2	46.2	44.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)