

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: P276503

Luminaire Tested: **24CZ2-50HE-S-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276503
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-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: 5143.9 lumens
Efficiency: N/A
Efficacy: 140.7 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

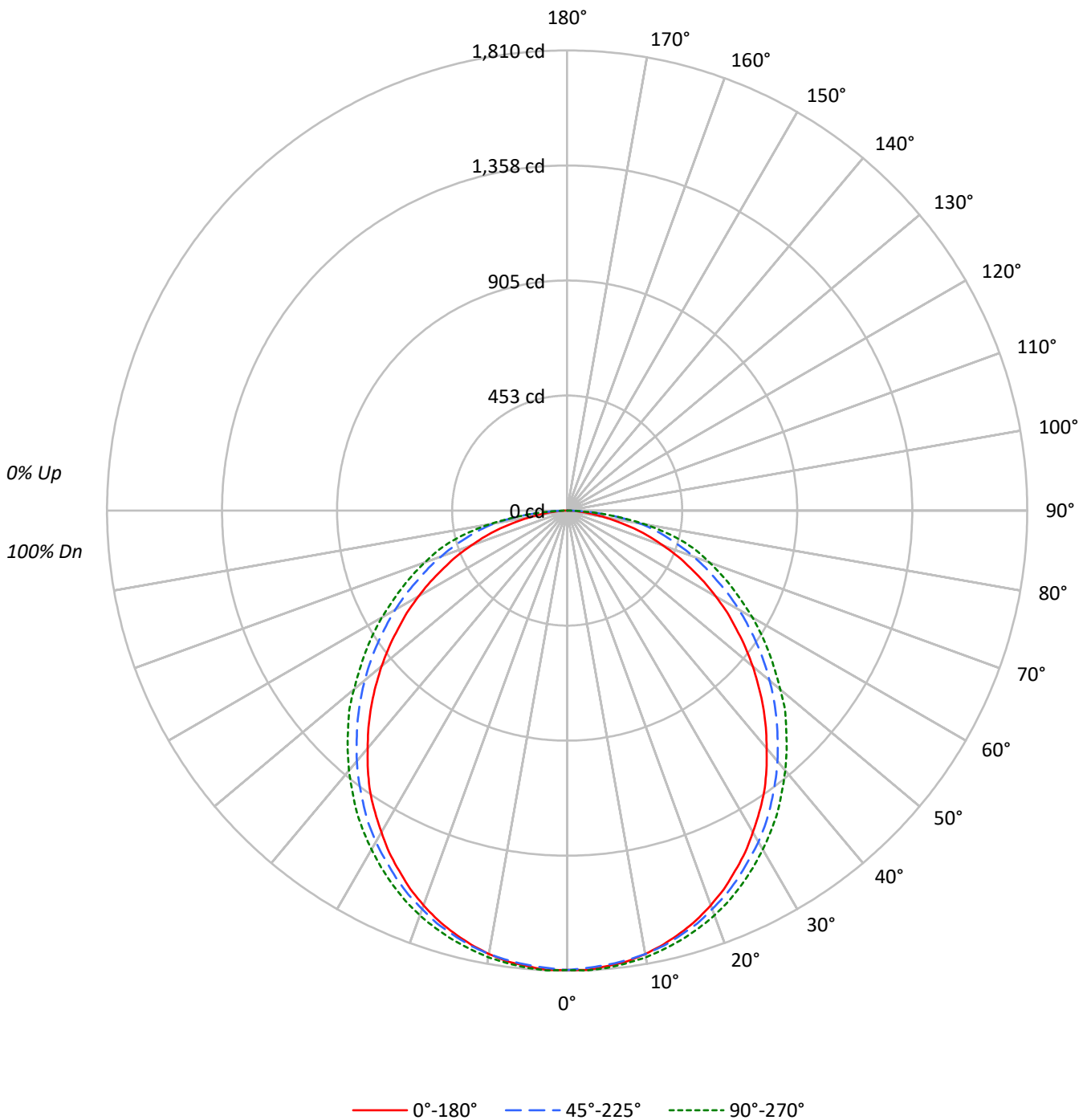
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2431	2431	2431
5°	2430	2423	2439
10°	2420	2420	2438
15°	2397	2408	2433
20°	2365	2389	2426
25°	2321	2365	2411
30°	2269	2338	2391
35°	2219	2300	2372
40°	2144	2261	2345
45°	2074	2217	2319
50°	1994	2175	2291
55°	1905	2135	2269
60°	1816	2102	2264
65°	1701	2065	2278
70°	1575	2076	2340
75°	1410	2115	2472
80°	1140	2241	2418
85°	858	1967	1917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	3.3
10°-20°	488.8	9.5
20°-30°	734.8	14.3
30°-40°	875.3	17.0
40°-50°	895.8	17.4
50°-60°	806.5	15.7
60°-70°	633.4	12.3
70°-80°	411.1	8.0
80°-90°	127.1	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°	1394.7	27.1
0°-40°	2270.0	44.1
0°-60°	3972.4	77.2
0°-90°	5143.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5143.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1807	1807	1807	1807	1807	
5°	1799	1802	1794	1804	1806	171
15°	1720	1725	1729	1743	1747	485
25°	1564	1577	1593	1619	1624	720
35°	1351	1368	1400	1435	1444	843
45°	1090	1116	1165	1209	1219	840
55°	812	848	910	958	967	728
65°	534	575	649	703	716	532
75°	271	324	407	462	476	287
85°	56	103	127	124	124	67
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1807.1	1807.1	1807.1	1807.1	1807.1
2.5°	1808.7	1808.7	1800.6	1808.7	1810.4
5°	1798.9	1802.2	1794.0	1803.8	1805.5
7.5°	1789.1	1789.1	1784.2	1794.0	1795.7
10°	1771.1	1772.8	1771.1	1782.6	1784.2
12.5°	1748.3	1751.5	1753.2	1764.6	1766.2
15°	1720.5	1725.4	1728.7	1743.4	1746.6
17.5°	1689.5	1694.4	1702.5	1718.9	1722.1
20°	1651.9	1658.4	1668.2	1689.5	1694.4
22.5°	1611.0	1617.6	1633.9	1653.5	1661.7
25°	1563.6	1576.7	1593.1	1619.2	1624.1
27.5°	1516.3	1527.7	1548.9	1576.7	1583.2
30°	1460.7	1478.7	1504.8	1532.6	1539.1
32.5°	1406.8	1424.8	1455.8	1485.2	1493.4
35°	1351.2	1367.6	1400.3	1434.6	1444.4
37.5°	1287.5	1308.8	1344.7	1379.0	1388.8
40°	1220.5	1246.7	1287.5	1323.5	1334.9
42.5°	1156.8	1184.6	1225.4	1264.6	1277.7
45°	1089.8	1116.0	1165.0	1209.1	1218.9
47.5°	1021.2	1050.6	1102.9	1147.0	1163.3
50°	952.6	983.6	1039.2	1084.9	1094.7
52.5°	883.9	916.6	975.4	1024.5	1029.4
55°	812.0	848.0	910.1	957.5	967.3
57.5°	746.7	777.7	844.7	893.7	905.2
60°	674.8	709.1	781.0	826.8	841.5
62.5°	606.2	642.1	717.3	763.0	776.1
65°	534.3	575.1	648.7	702.6	715.6
67.5°	472.2	511.4	589.8	642.1	655.2
70°	400.3	444.4	527.7	581.7	594.7
72.5°	338.2	384.0	467.3	519.6	539.2
75°	271.2	323.5	406.8	462.4	475.5
77.5°	205.9	266.3	351.3	393.8	393.8
80°	147.1	210.8	289.2	308.8	312.1
82.5°	96.4	158.5	214.0	212.4	212.4
85°	55.6	102.9	127.4	124.2	124.2
87.5°	21.2	42.5	45.7	45.7	44.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)