

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: P276004

Luminaire Tested: **24CZ2-65HE-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276004
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65HE-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5676.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.27 / 1.37
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

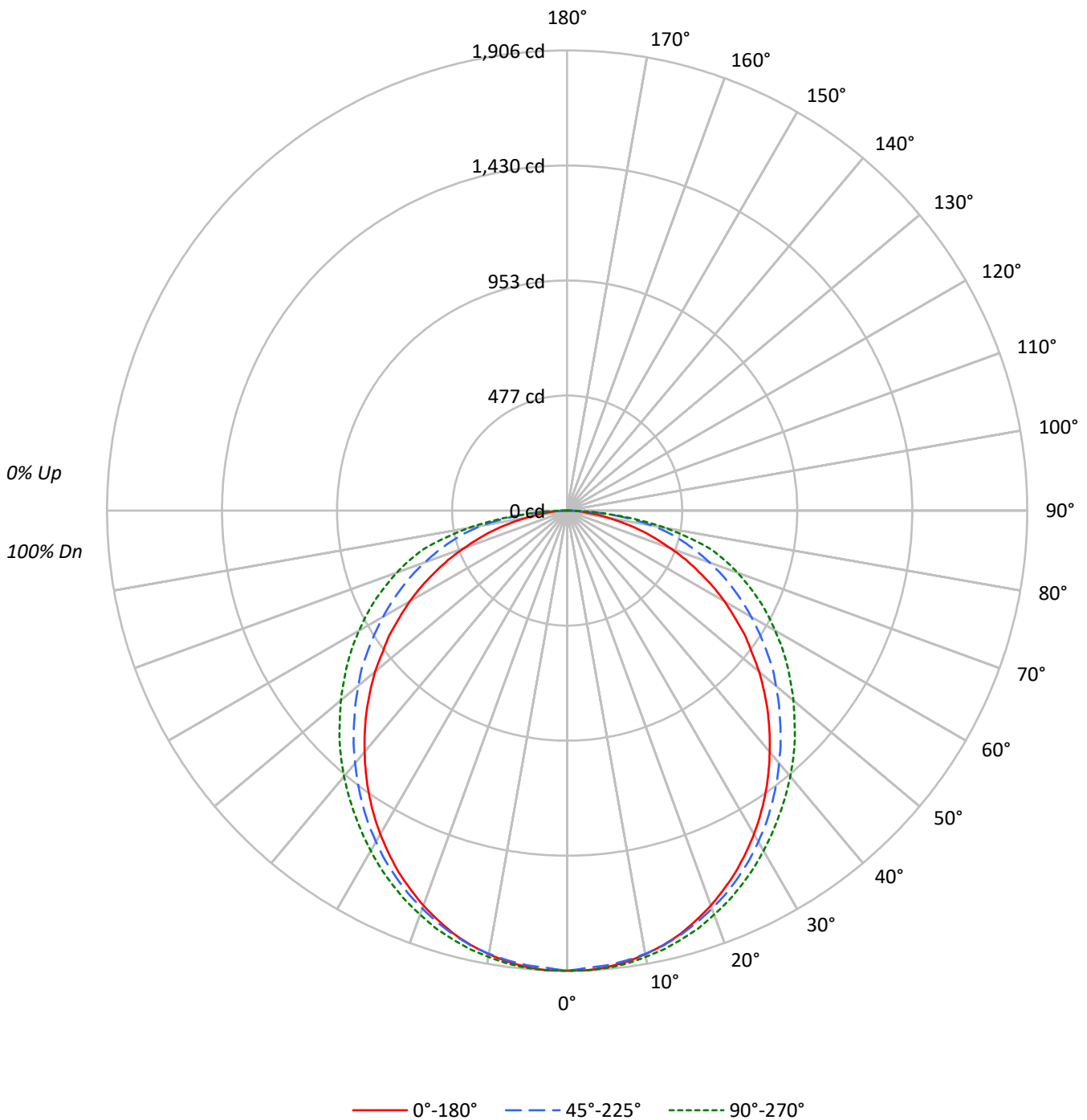
Input Watts (W): 50.189868
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	58	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	35	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2564	2564	2564
5°	2564	2553	2569
10°	2549	2547	2565
15°	2528	2533	2560
20°	2493	2512	2550
25°	2452	2489	2540
30°	2405	2460	2528
35°	2352	2430	2520
40°	2292	2399	2525
45°	2235	2375	2538
50°	2173	2363	2561
55°	2106	2360	2609
60°	2024	2370	2676
65°	1918	2406	2792
70°	1781	2467	2951
75°	1625	2590	3201
80°	1336	2789	3200
85°	1024	2573	2749



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.2	3.2
10°-20°	514.6	9.1
20°-30°	774.3	13.6
30°-40°	927.9	16.3
40°-50°	967.0	17.0
50°-60°	899.7	15.9
60°-70°	741.0	13.1
70°-80°	504.7	8.9
80°-90°	166.6	2.9
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°	1469.1	25.9
0°-40°	2397.1	42.2
0°-60°	4263.8	75.1
0°-90°	5676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5676.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1906	1906	1906	1906	1906	
5°	1898	1898	1891	1900	1902	180
15°	1815	1817	1819	1836	1838	511
25°	1652	1659	1676	1705	1711	760
35°	1432	1449	1480	1519	1534	895
45°	1174	1199	1248	1311	1334	906
55°	898	928	1006	1086	1112	800
65°	602	654	756	845	877	598
75°	313	383	498	587	616	330
85°	66	129	167	178	178	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1905.7	1905.7	1905.7	1905.7	1905.7
2.5°	1905.7	1905.7	1896.2	1905.7	1905.7
5°	1898.1	1898.1	1890.6	1900.0	1901.9
7.5°	1884.9	1886.8	1879.2	1890.6	1892.5
10°	1865.9	1867.8	1864.0	1875.4	1877.3
12.5°	1843.2	1845.1	1845.1	1858.4	1860.2
15°	1814.8	1816.7	1818.6	1835.6	1837.5
17.5°	1778.8	1784.5	1788.3	1809.1	1812.9
20°	1740.9	1746.6	1754.2	1776.9	1780.7
22.5°	1697.3	1704.9	1718.2	1742.8	1748.5
25°	1651.9	1659.4	1676.5	1704.9	1710.6
27.5°	1600.7	1612.1	1632.9	1663.2	1670.8
30°	1547.7	1559.0	1583.7	1615.9	1627.2
32.5°	1490.9	1506.0	1534.4	1570.4	1581.8
35°	1432.1	1449.2	1479.5	1519.3	1534.4
37.5°	1369.6	1388.6	1424.5	1468.1	1487.1
40°	1305.2	1327.9	1365.8	1417.0	1437.8
42.5°	1240.8	1261.6	1309.0	1363.9	1386.7
45°	1174.5	1199.1	1248.4	1310.9	1333.6
47.5°	1106.3	1130.9	1189.6	1256.0	1276.8
50°	1038.1	1062.7	1129.0	1199.1	1223.7
52.5°	964.2	996.4	1072.2	1142.3	1166.9
55°	897.9	928.2	1005.9	1085.5	1112.0
57.5°	822.1	858.1	943.4	1026.7	1055.2
60°	752.1	789.9	880.9	966.1	994.5
62.5°	680.1	721.7	818.4	905.5	937.7
65°	602.4	653.5	755.8	844.9	877.1
67.5°	532.3	585.4	693.3	784.3	812.7
70°	452.7	517.2	627.0	718.0	750.2
72.5°	384.6	449.0	564.5	653.5	685.8
75°	312.6	382.7	498.2	587.2	615.7
77.5°	240.6	318.3	433.8	502.0	511.5
80°	172.4	253.8	359.9	399.7	413.0
82.5°	121.2	195.1	265.2	291.7	299.3
85°	66.3	128.8	166.7	178.1	178.1
87.5°	28.4	54.9	66.3	68.2	70.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)