

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: P275996

Luminaire Tested: **24CZ2-55HE-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275996  
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: 24CZ2-55HE-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4903.8 lumens  
Efficiency: N/A  
Efficacy: 117.4 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

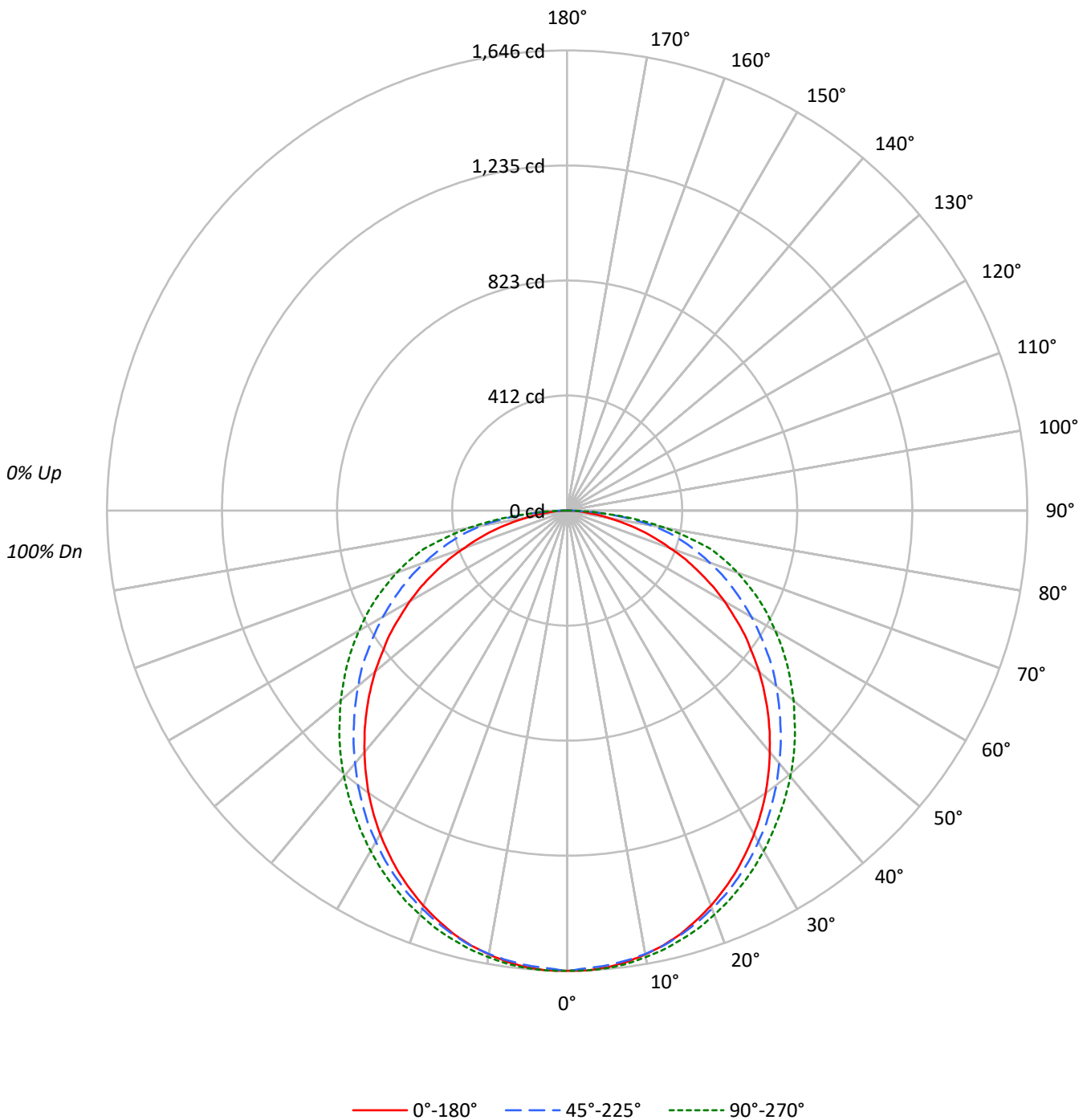
Input Watts (W): 41.766486  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2215	2215	2215
5°	2215	2206	2219
10°	2203	2200	2216
15°	2184	2188	2211
20°	2153	2170	2203
25°	2119	2150	2194
30°	2077	2126	2184
35°	2032	2099	2178
40°	1981	2073	2182
45°	1931	2052	2192
50°	1877	2042	2213
55°	1820	2038	2254
60°	1748	2048	2312
65°	1657	2079	2412
70°	1539	2131	2550
75°	1404	2237	2765
80°	1154	2410	2765
85°	885	2223	2374



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.7	3.2
10°-20°	444.5	9.1
20°-30°	669.0	13.6
30°-40°	801.7	16.3
40°-50°	835.5	17.0
50°-60°	777.3	15.9
60°-70°	640.2	13.1
70°-80°	436.0	8.9
80°-90°	143.9	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°	1269.2	25.9
0°-40°	2070.9	42.2
0°-60°	3683.7	75.1
0°-90°	4903.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4903.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1646	1646	1646	1646	1646	
5°	1640	1640	1633	1642	1643	156
15°	1568	1570	1571	1586	1588	442
25°	1427	1434	1448	1473	1478	657
35°	1237	1252	1278	1313	1326	773
45°	1015	1036	1078	1132	1152	783
55°	776	802	869	938	961	691
65°	520	565	653	730	758	517
75°	270	331	430	507	532	285
85°	57	111	144	154	154	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1646.4	1646.4	1646.4	1646.4	1646.4
2.5°	1646.4	1646.4	1638.2	1646.4	1646.4
5°	1639.9	1639.9	1633.3	1641.5	1643.2
7.5°	1628.4	1630.1	1623.5	1633.3	1635.0
10°	1612.1	1613.7	1610.4	1620.2	1621.9
12.5°	1592.4	1594.1	1594.1	1605.5	1607.1
15°	1567.9	1569.5	1571.1	1585.9	1587.5
17.5°	1536.8	1541.7	1545.0	1563.0	1566.2
20°	1504.0	1509.0	1515.5	1535.1	1538.4
22.5°	1466.4	1472.9	1484.4	1505.7	1510.6
25°	1427.1	1433.7	1448.4	1472.9	1477.9
27.5°	1382.9	1392.8	1410.8	1436.9	1443.5
30°	1337.1	1346.9	1368.2	1396.0	1405.8
32.5°	1288.0	1301.1	1325.7	1356.7	1366.6
35°	1237.3	1252.0	1278.2	1312.6	1325.7
37.5°	1183.3	1199.6	1230.7	1268.4	1284.7
40°	1127.6	1147.3	1180.0	1224.2	1242.2
42.5°	1072.0	1090.0	1130.9	1178.4	1198.0
45°	1014.7	1036.0	1078.5	1132.5	1152.2
47.5°	955.8	977.1	1027.8	1085.1	1103.1
50°	896.9	918.1	975.4	1036.0	1057.2
52.5°	833.0	860.9	926.3	986.9	1008.2
55°	775.8	801.9	869.0	937.8	960.7
57.5°	710.3	741.4	815.0	887.0	911.6
60°	649.7	682.5	761.0	834.7	859.2
62.5°	587.5	623.5	707.0	782.3	810.1
65°	520.4	564.6	653.0	729.9	757.7
67.5°	459.9	505.7	599.0	677.6	702.1
70°	391.1	446.8	541.7	620.3	648.1
72.5°	332.2	387.9	487.7	564.6	592.5
75°	270.0	330.6	430.4	507.3	531.9
77.5°	207.8	275.0	374.8	433.7	441.9
80°	148.9	219.3	311.0	345.3	356.8
82.5°	104.7	168.6	229.1	252.0	258.6
85°	57.3	111.3	144.0	153.8	153.8
87.5°	24.5	47.5	57.3	58.9	60.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)