

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: P275917

Luminaire Tested: **24CZ2-55HE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275917  
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-L83050-W2A1-U-3000K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RIBBED LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4962.0 lumens  
Efficiency: N/A  
Efficacy: 124.1 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

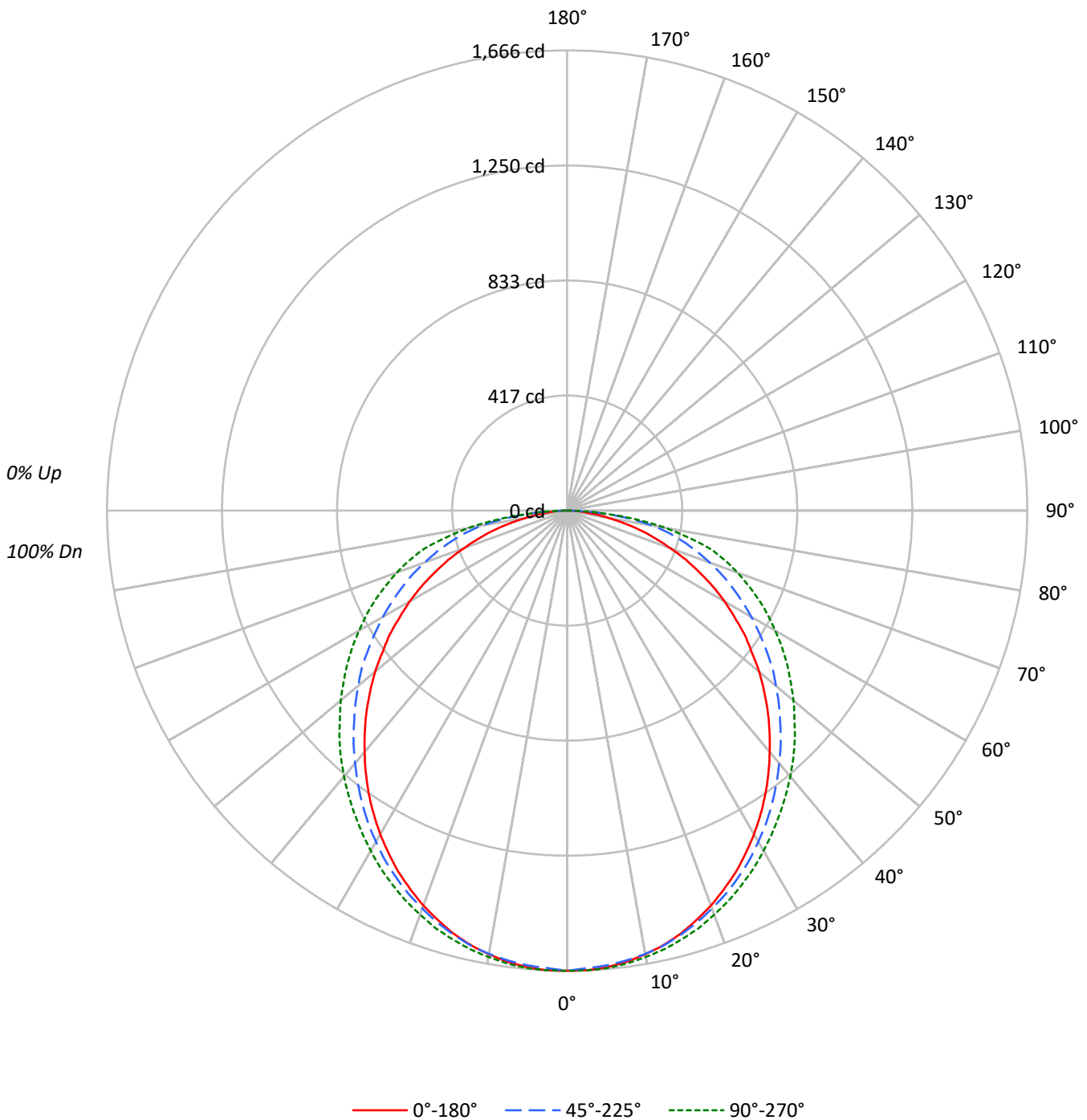
Input Watts (W): 39.99  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2242	2242	2242
5°	2241	2232	2246
10°	2229	2226	2242
15°	2210	2215	2238
20°	2179	2196	2229
25°	2144	2176	2220
30°	2102	2151	2210
35°	2056	2124	2203
40°	2004	2097	2208
45°	1954	2077	2218
50°	1900	2066	2239
55°	1841	2063	2280
60°	1769	2072	2340
65°	1677	2104	2441
70°	1557	2156	2580
75°	1420	2264	2798
80°	1168	2438	2797
85°	895	2249	2404



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.6	3.2
10°-20°	449.8	9.1
20°-30°	676.9	13.6
30°-40°	811.2	16.3
40°-50°	845.4	17.0
50°-60°	786.5	15.9
60°-70°	647.8	13.1
70°-80°	441.2	8.9
80°-90°	145.6	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°	1284.3	25.9
0°-40°	2095.5	42.2
0°-60°	3727.4	75.1
0°-90°	4962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4962.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1659	1659	1653	1661	1663	157
15°	1586	1588	1590	1605	1606	447
25°	1444	1451	1466	1490	1495	665
35°	1252	1267	1293	1328	1341	783
45°	1027	1048	1091	1146	1166	792
55°	785	812	879	949	972	700
65°	527	571	661	739	767	523
75°	273	334	436	513	538	288
85°	58	113	146	156	156	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1666.0	1666.0	1666.0	1666.0	1666.0
2.5°	1666.0	1666.0	1657.7	1666.0	1666.0
5°	1659.4	1659.4	1652.7	1661.0	1662.7
7.5°	1647.8	1649.4	1642.8	1652.7	1654.4
10°	1631.2	1632.9	1629.5	1639.5	1641.1
12.5°	1611.3	1613.0	1613.0	1624.6	1626.2
15°	1586.5	1588.1	1589.8	1604.7	1606.4
17.5°	1555.0	1560.0	1563.3	1581.5	1584.8
20°	1521.9	1526.9	1533.5	1553.4	1556.7
22.5°	1483.8	1490.4	1502.0	1523.6	1528.5
25°	1444.1	1450.7	1465.6	1490.4	1495.4
27.5°	1399.4	1409.3	1427.5	1454.0	1460.6
30°	1353.0	1362.9	1384.4	1412.6	1422.5
32.5°	1303.3	1316.6	1341.4	1372.9	1382.8
35°	1252.0	1266.9	1293.4	1328.1	1341.4
37.5°	1197.3	1213.9	1245.3	1283.4	1300.0
40°	1141.0	1160.9	1194.0	1238.7	1256.9
42.5°	1084.7	1102.9	1144.3	1192.3	1212.2
45°	1026.7	1048.3	1091.3	1146.0	1165.9
47.5°	967.1	988.7	1040.0	1098.0	1116.2
50°	907.5	929.0	987.0	1048.3	1069.8
52.5°	842.9	871.1	937.3	998.6	1020.1
55°	785.0	811.5	879.4	948.9	972.1
57.5°	718.7	750.2	824.7	897.6	922.4
60°	657.4	690.6	770.1	844.6	869.4
62.5°	594.5	631.0	715.4	791.6	819.7
65°	526.6	571.3	660.8	738.6	766.7
67.5°	465.3	511.7	606.1	685.6	710.4
70°	395.8	452.1	548.1	627.6	655.8
72.5°	336.2	392.5	493.5	571.3	599.5
75°	273.2	334.5	435.5	513.4	538.2
77.5°	210.3	278.2	379.2	438.9	447.1
80°	150.7	221.9	314.6	349.4	361.0
82.5°	106.0	170.6	231.8	255.0	261.7
85°	58.0	112.6	145.7	155.7	155.7
87.5°	24.8	48.0	58.0	59.6	61.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)