

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: P276642

Luminaire Tested: **24CZ2-55HE-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276642  
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: 24CZ2-55HE-S-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4322.8 lumens  
Efficiency: N/A  
Efficacy: 108.1 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

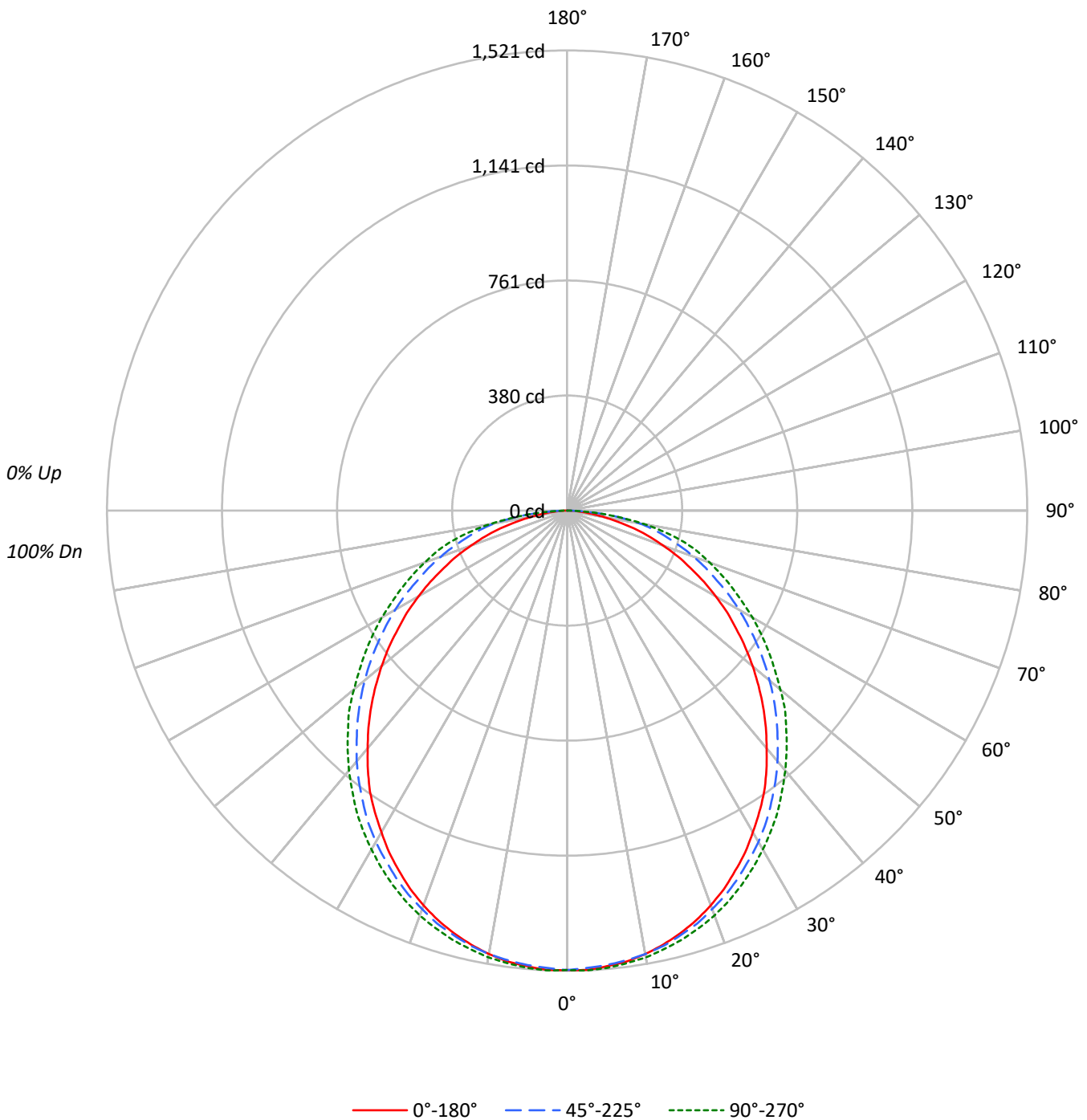
Input Watts (W): 39.99  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2043	2043	2043
5°	2042	2036	2049
10°	2034	2034	2049
15°	2014	2024	2045
20°	1988	2007	2039
25°	1951	1988	2026
30°	1907	1965	2010
35°	1865	1933	1994
40°	1802	1900	1970
45°	1743	1863	1949
50°	1676	1828	1926
55°	1601	1794	1907
60°	1526	1766	1903
65°	1429	1735	1915
70°	1323	1745	1966
75°	1185	1777	2077
80°	958	1883	2032
85°	721	1653	1612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.8	3.3
10°-20°	410.8	9.5
20°-30°	617.5	14.3
30°-40°	735.6	17.0
40°-50°	752.8	17.4
50°-60°	677.8	15.7
60°-70°	532.3	12.3
70°-80°	345.4	8.0
80°-90°	106.8	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°	1172.1	27.1
0°-40°	1907.7	44.1
0°-60°	3338.3	77.2
0°-90°	4322.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4322.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1519	1519	1519	1519	1519	
5°	1512	1514	1508	1516	1517	144
15°	1446	1450	1453	1465	1468	408
25°	1314	1325	1339	1361	1365	605
35°	1136	1149	1177	1206	1214	708
45°	916	938	979	1016	1024	706
55°	682	713	765	805	813	612
65°	449	483	545	590	601	447
75°	228	272	342	389	400	241
85°	47	86	107	104	104	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1518.7	1518.7	1518.7	1518.7	1518.7
2.5°	1520.0	1520.0	1513.2	1520.0	1521.4
5°	1511.8	1514.5	1507.7	1515.9	1517.3
7.5°	1503.6	1503.6	1499.4	1507.7	1509.0
10°	1488.4	1489.8	1488.4	1498.1	1499.4
12.5°	1469.2	1472.0	1473.3	1483.0	1484.3
15°	1445.9	1450.0	1452.7	1465.1	1467.9
17.5°	1419.8	1423.9	1430.8	1444.5	1447.3
20°	1388.2	1393.7	1401.9	1419.8	1423.9
22.5°	1353.9	1359.4	1373.1	1389.6	1396.4
25°	1314.1	1325.0	1338.8	1360.7	1364.9
27.5°	1274.2	1283.9	1301.7	1325.0	1330.5
30°	1227.6	1242.7	1264.6	1288.0	1293.5
32.5°	1182.2	1197.3	1223.4	1248.2	1255.0
35°	1135.6	1149.3	1176.8	1205.6	1213.8
37.5°	1082.0	1099.9	1130.1	1158.9	1167.1
40°	1025.7	1047.7	1082.0	1112.2	1121.8
42.5°	972.2	995.5	1029.8	1062.8	1073.8
45°	915.9	937.8	979.0	1016.1	1024.3
47.5°	858.2	882.9	926.8	963.9	977.7
50°	800.5	826.6	873.3	911.7	920.0
52.5°	742.9	770.3	819.7	860.9	865.1
55°	682.4	712.6	764.8	804.6	812.9
57.5°	627.5	653.6	709.9	751.1	760.7
60°	567.1	595.9	656.3	694.8	707.2
62.5°	509.4	539.6	602.8	641.2	652.2
65°	449.0	483.3	545.1	590.4	601.4
67.5°	396.8	429.8	495.7	539.6	550.6
70°	336.4	373.5	443.5	488.8	499.8
72.5°	284.2	322.7	392.7	436.6	453.1
75°	227.9	271.9	341.9	388.6	399.6
77.5°	173.0	223.8	295.2	330.9	330.9
80°	123.6	177.1	243.0	259.5	262.3
82.5°	81.0	133.2	179.9	178.5	178.5
85°	46.7	86.5	107.1	104.4	104.4
87.5°	17.9	35.7	38.4	38.4	37.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)