

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: P276218

Luminaire Tested: **24CZ2-50HE-UNV-L92765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276218  
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: 24CZ2-50HE-UNV-L92765-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: 4395.1 lumens  
Efficiency: N/A  
Efficacy: 120.3 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

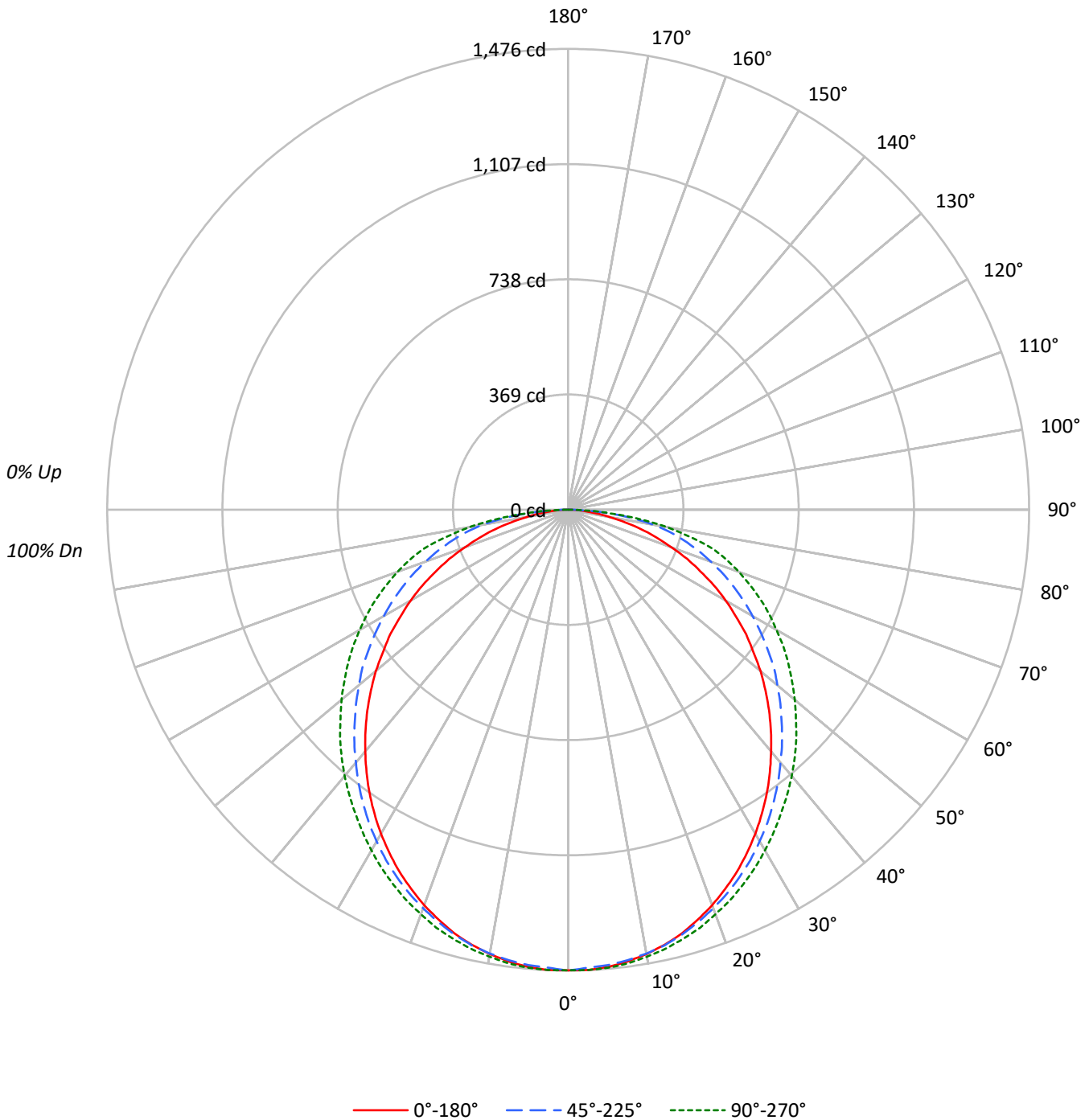
Input Watts (W): 36.549  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1985	1985	1985
5°	1985	1977	1989
10°	1974	1972	1986
15°	1957	1962	1982
20°	1930	1945	1974
25°	1899	1927	1966
30°	1862	1905	1958
35°	1821	1882	1952
40°	1775	1858	1955
45°	1730	1839	1965
50°	1683	1830	1984
55°	1631	1827	2020
60°	1567	1836	2072
65°	1485	1863	2162
70°	1379	1910	2285
75°	1258	2006	2478
80°	1034	2159	2478
85°	792	1993	2129



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.6	3.2
10°-20°	398.4	9.1
20°-30°	599.6	13.6
30°-40°	718.5	16.3
40°-50°	748.8	17.0
50°-60°	696.7	15.9
60°-70°	573.8	13.1
70°-80°	390.8	8.9
80°-90°	129.0	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°	1137.6	25.9
0°-40°	1856.1	42.2
0°-60°	3301.5	75.1
0°-90°	4395.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4395.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1470	1470	1464	1471	1473	139
15°	1405	1407	1408	1421	1423	396
25°	1279	1285	1298	1320	1325	589
35°	1109	1122	1146	1176	1188	693
45°	909	928	967	1015	1033	701
55°	695	719	779	840	861	620
65°	466	506	585	654	679	463
75°	242	296	386	455	477	255
85°	51	100	129	138	138	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1475.6	1475.6	1475.6	1475.6	1475.6
2.5°	1475.6	1475.6	1468.3	1475.6	1475.6
5°	1469.8	1469.8	1463.9	1471.2	1472.7
7.5°	1459.5	1461.0	1455.1	1463.9	1465.4
10°	1444.8	1446.3	1443.4	1452.2	1453.6
12.5°	1427.2	1428.7	1428.7	1439.0	1440.4
15°	1405.2	1406.7	1408.2	1421.4	1422.8
17.5°	1377.4	1381.8	1384.7	1400.8	1403.8
20°	1348.0	1352.4	1358.3	1375.9	1378.8
22.5°	1314.3	1320.2	1330.4	1349.5	1353.9
25°	1279.1	1285.0	1298.2	1320.2	1324.6
27.5°	1239.5	1248.3	1264.4	1287.9	1293.8
30°	1198.4	1207.2	1226.3	1251.2	1260.0
32.5°	1154.4	1166.1	1188.1	1216.0	1224.8
35°	1108.9	1122.1	1145.6	1176.4	1188.1
37.5°	1060.5	1075.2	1103.1	1136.8	1151.5
40°	1010.7	1028.3	1057.6	1097.2	1113.3
42.5°	960.8	976.9	1013.6	1056.1	1073.7
45°	909.4	928.5	966.7	1015.1	1032.7
47.5°	856.6	875.7	921.2	972.5	988.7
50°	803.8	822.9	874.2	928.5	947.6
52.5°	746.6	771.6	830.2	884.5	903.6
55°	695.3	718.8	778.9	840.5	861.0
57.5°	636.6	664.5	730.5	795.0	817.0
60°	582.3	611.7	682.1	748.1	770.1
62.5°	526.6	558.9	633.7	701.2	726.1
65°	466.5	506.1	585.3	654.2	679.1
67.5°	412.2	453.3	536.9	607.3	629.3
70°	350.6	400.4	485.5	555.9	580.9
72.5°	297.8	347.6	437.1	506.1	531.0
75°	242.0	296.3	385.8	454.7	476.7
77.5°	186.3	246.4	335.9	388.7	396.0
80°	133.5	196.6	278.7	309.5	319.8
82.5°	93.9	151.1	205.4	225.9	231.8
85°	51.3	99.7	129.1	137.9	137.9
87.5°	22.0	42.5	51.3	52.8	54.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)