

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: P275987

Luminaire Tested: **24CZ2-50HE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275987
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-L93050-W2A1-U-3000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3699.1 lumens
Efficiency: N/A
Efficacy: 101.3 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

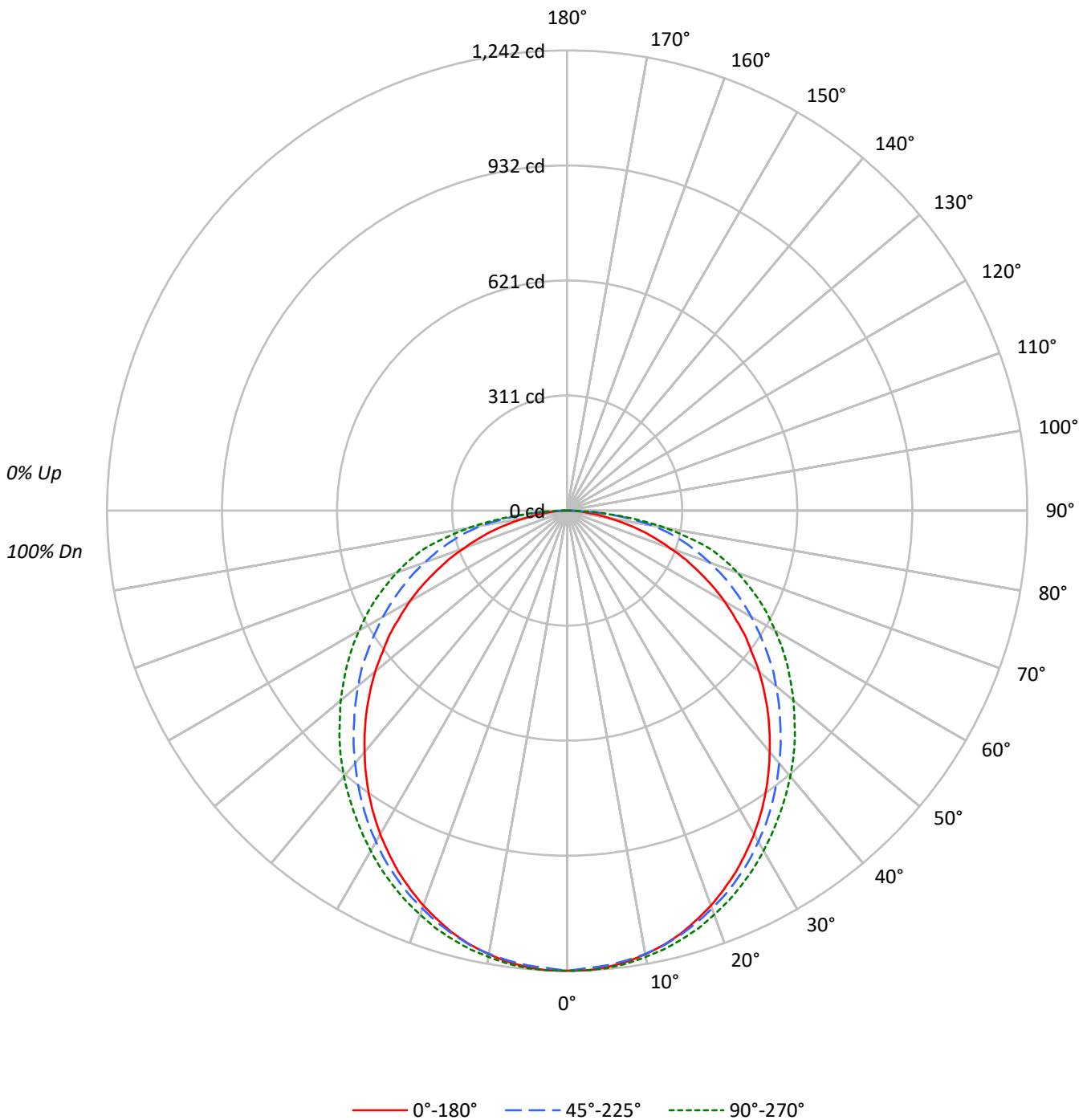
Input Watts (W): 36.533376
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1671	1671	1671
5°	1671	1664	1674
10°	1661	1660	1671
15°	1647	1651	1668
20°	1624	1637	1662
25°	1598	1622	1655
30°	1567	1604	1648
35°	1533	1584	1643
40°	1494	1563	1646
45°	1456	1548	1654
50°	1416	1540	1669
55°	1373	1538	1700
60°	1319	1545	1744
65°	1250	1568	1820
70°	1161	1607	1923
75°	1059	1688	2086
80°	870	1818	2085
85°	667	1677	1791



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	3.2
10°-20°	335.3	9.1
20°-30°	504.6	13.6
30°-40°	604.7	16.3
40°-50°	630.2	17.0
50°-60°	586.3	15.9
60°-70°	482.9	13.1
70°-80°	328.9	8.9
80°-90°	108.6	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°	957.4	25.9
0°-40°	1562.2	42.2
0°-60°	2778.7	75.1
0°-90°	3699.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3699.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1242	1242	1242	1242	1242	
5°	1237	1237	1232	1238	1240	117
15°	1183	1184	1185	1196	1198	333
25°	1076	1082	1093	1111	1115	496
35°	933	944	964	990	1000	583
45°	765	782	814	854	869	590
55°	585	605	656	707	725	522
65°	393	426	493	551	572	390
75°	204	249	325	383	401	215
85°	43	84	109	116	116	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1242.0	1242.0	1242.0	1242.0	1242.0
2.5°	1242.0	1242.0	1235.8	1242.0	1242.0
5°	1237.0	1237.0	1232.1	1238.2	1239.5
7.5°	1228.4	1229.6	1224.7	1232.1	1233.3
10°	1216.0	1217.3	1214.8	1222.2	1223.4
12.5°	1201.2	1202.4	1202.4	1211.1	1212.3
15°	1182.7	1183.9	1185.2	1196.3	1197.5
17.5°	1159.2	1162.9	1165.4	1179.0	1181.5
20°	1134.5	1138.3	1143.2	1158.0	1160.5
22.5°	1106.2	1111.1	1119.7	1135.8	1139.5
25°	1076.5	1081.5	1092.6	1111.1	1114.8
27.5°	1043.2	1050.6	1064.2	1083.9	1088.9
30°	1008.6	1016.0	1032.1	1053.1	1060.5
32.5°	971.6	981.5	1000.0	1023.4	1030.8
35°	933.3	944.4	964.2	990.1	1000.0
37.5°	892.6	904.9	928.4	956.8	969.1
40°	850.6	865.4	890.1	923.4	937.0
42.5°	808.6	822.2	853.1	888.9	903.7
45°	765.4	781.5	813.6	854.3	869.1
47.5°	721.0	737.0	775.3	818.5	832.1
50°	676.5	692.6	735.8	781.5	797.5
52.5°	628.4	649.4	698.8	744.4	760.5
55°	585.2	604.9	655.5	707.4	724.7
57.5°	535.8	559.2	614.8	669.1	687.6
60°	490.1	514.8	574.1	629.6	648.1
62.5°	443.2	470.4	533.3	590.1	611.1
65°	392.6	425.9	492.6	550.6	571.6
67.5°	346.9	381.5	451.8	511.1	529.6
70°	295.1	337.0	408.6	467.9	488.9
72.5°	250.6	292.6	367.9	425.9	446.9
75°	203.7	249.4	324.7	382.7	401.2
77.5°	156.8	207.4	282.7	327.2	333.3
80°	112.3	165.4	234.6	260.5	269.1
82.5°	79.0	127.2	172.8	190.1	195.1
85°	43.2	83.9	108.6	116.0	116.0
87.5°	18.5	35.8	43.2	44.4	45.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)