

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: P276582

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276582
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: 24CZ2-45-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4496.8 lumens
Efficiency: N/A
Efficacy: 127.2 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

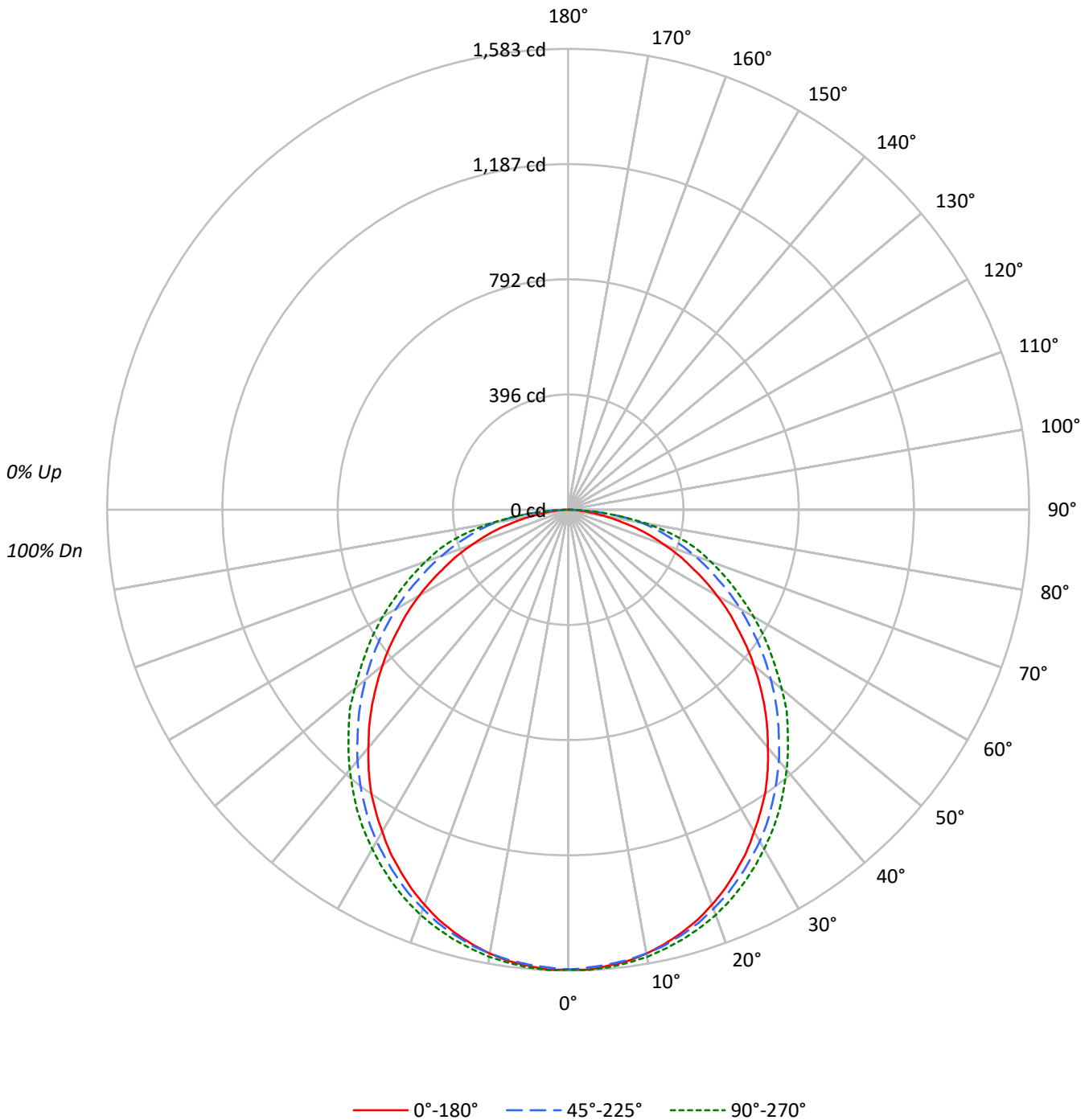
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2126	2126	2126
5°	2124	2118	2132
10°	2115	2115	2131
15°	2095	2105	2127
20°	2068	2088	2121
25°	2029	2068	2108
30°	1984	2044	2090
35°	1940	2011	2074
40°	1874	1977	2050
45°	1813	1938	2028
50°	1743	1901	2003
55°	1665	1866	1984
60°	1587	1837	1979
65°	1487	1805	1992
70°	1376	1815	2045
75°	1233	1849	2161
80°	996	1959	2114
85°	750	1720	1677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.6	3.3
10°-20°	427.3	9.5
20°-30°	642.4	14.3
30°-40°	765.2	17.0
40°-50°	783.1	17.4
50°-60°	705.0	15.7
60°-70°	553.7	12.3
70°-80°	359.4	8.0
80°-90°	111.2	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°	1219.3	27.1
0°-40°	1984.5	44.1
0°-60°	3472.6	77.2
0°-90°	4496.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4496.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1580	1580	1580	1580	1580	
5°	1573	1576	1568	1577	1578	149
15°	1504	1508	1511	1524	1527	424
25°	1367	1378	1393	1416	1420	630
35°	1181	1196	1224	1254	1263	737
45°	953	976	1018	1057	1066	735
55°	710	741	796	837	846	636
65°	467	503	567	614	626	465
75°	237	283	356	404	416	251
85°	49	90	111	109	109	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1579.8	1579.8	1579.8	1579.8	1579.8
2.5°	1581.2	1581.2	1574.1	1581.2	1582.6
5°	1572.6	1575.5	1568.3	1576.9	1578.3
7.5°	1564.1	1564.1	1559.8	1568.3	1569.8
10°	1548.3	1549.8	1548.3	1558.3	1559.8
12.5°	1528.3	1531.2	1532.6	1542.6	1544.1
15°	1504.1	1508.3	1511.2	1524.1	1526.9
17.5°	1476.9	1481.2	1488.4	1502.6	1505.5
20°	1444.1	1449.8	1458.4	1476.9	1481.2
22.5°	1408.4	1414.1	1428.4	1445.5	1452.6
25°	1366.9	1378.4	1392.7	1415.5	1419.8
27.5°	1325.5	1335.5	1354.1	1378.4	1384.1
30°	1277.0	1292.7	1315.5	1339.8	1345.5
32.5°	1229.8	1245.5	1272.7	1298.4	1305.5
35°	1181.3	1195.5	1224.1	1254.1	1262.7
37.5°	1125.5	1144.1	1175.5	1205.5	1214.1
40°	1067.0	1089.8	1125.5	1157.0	1167.0
42.5°	1011.3	1035.6	1071.3	1105.6	1117.0
45°	952.7	975.6	1018.4	1057.0	1065.6
47.5°	892.7	918.4	964.1	1002.7	1017.0
50°	832.7	859.9	908.4	948.4	957.0
52.5°	772.7	801.3	852.7	895.6	899.9
55°	709.9	741.3	795.6	837.0	845.6
57.5°	652.8	679.9	738.5	781.3	791.3
60°	589.9	619.9	682.8	722.8	735.6
62.5°	529.9	561.3	627.0	667.0	678.5
65°	467.1	502.8	567.1	614.2	625.6
67.5°	412.8	447.1	515.6	561.3	572.8
70°	349.9	388.5	461.4	508.5	519.9
72.5°	295.7	335.7	408.5	454.2	471.4
75°	237.1	282.8	355.7	404.2	415.7
77.5°	180.0	232.8	307.1	344.2	344.2
80°	128.6	184.3	252.8	270.0	272.8
82.5°	84.3	138.6	187.1	185.7	185.7
85°	48.6	90.0	111.4	108.6	108.6
87.5°	18.6	37.1	40.0	40.0	38.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)