

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: P276370

Luminaire Tested: **24CZ2-35-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276370
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: 24CZ2-35-S-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3748.0 lumens
Efficiency: N/A
Efficacy: 137.2 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

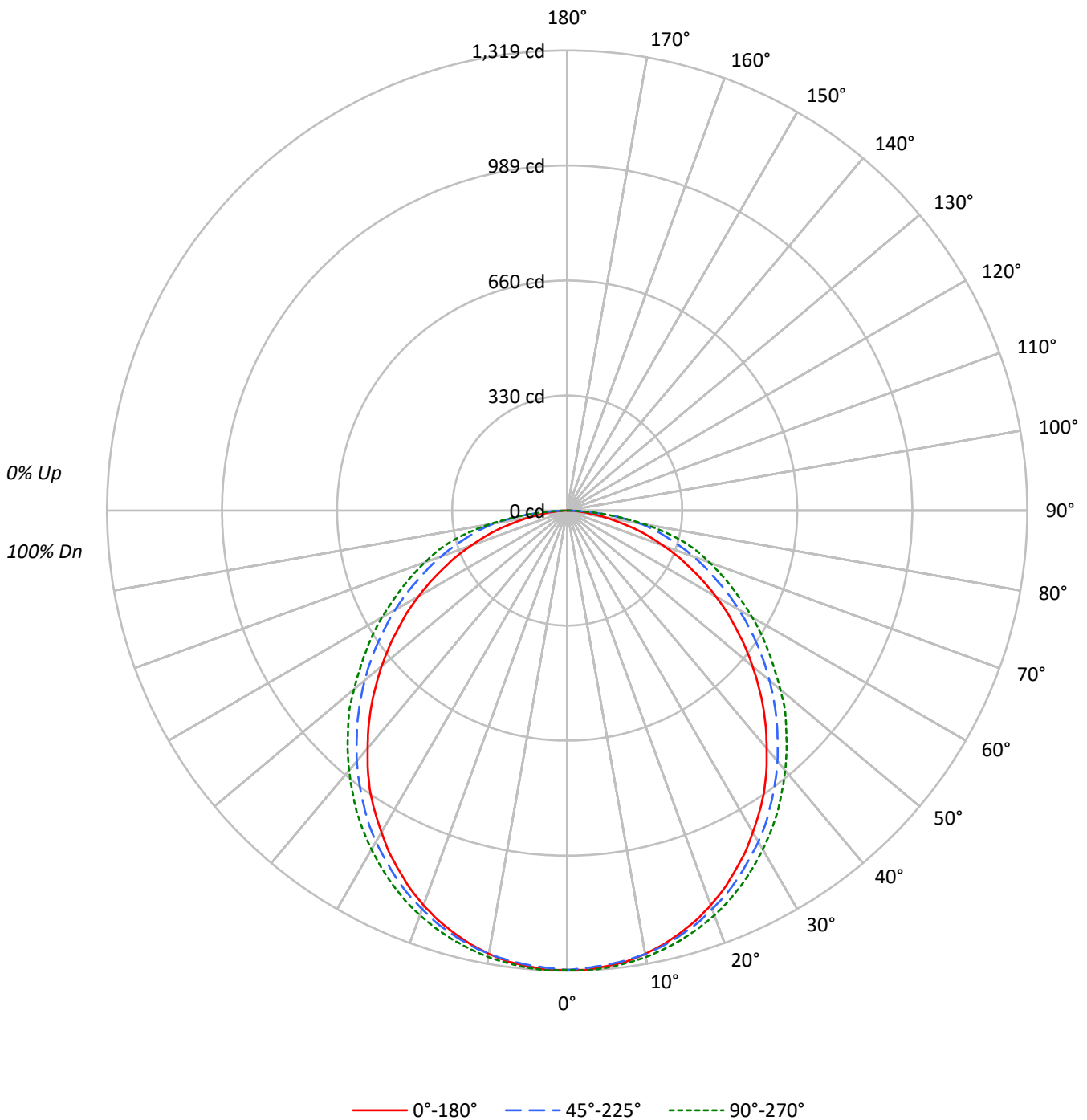
Input Watts (W): 27.31596
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1772	1772	1772
5°	1770	1766	1777
10°	1763	1763	1776
15°	1746	1755	1773
20°	1723	1740	1768
25°	1691	1723	1757
30°	1654	1704	1742
35°	1617	1676	1729
40°	1562	1648	1708
45°	1511	1615	1690
50°	1453	1585	1670
55°	1388	1555	1653
60°	1323	1531	1650
65°	1239	1505	1660
70°	1148	1513	1705
75°	1027	1541	1801
80°	830	1633	1762
85°	625	1434	1397



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.7	3.3
10°-20°	356.2	9.5
20°-30°	535.4	14.3
30°-40°	637.8	17.0
40°-50°	652.7	17.4
50°-60°	587.6	15.7
60°-70°	461.5	12.3
70°-80°	299.5	8.0
80°-90°	92.6	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°	1016.2	27.1
0°-40°	1654.0	44.1
0°-60°	2894.4	77.2
0°-90°	3748.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3748.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1317	1317	1317	1317	1317	
5°	1311	1313	1307	1314	1316	125
15°	1254	1257	1260	1270	1273	353
25°	1139	1149	1161	1180	1183	525
35°	984	996	1020	1045	1052	614
45°	794	813	849	881	888	612
55°	592	618	663	698	705	530
65°	389	419	473	512	521	388
75°	198	236	296	337	346	209
85°	40	75	93	90	90	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.7	1316.7	1316.7	1316.7	1316.7
2.5°	1317.9	1317.9	1311.9	1317.9	1319.1
5°	1310.7	1313.1	1307.2	1314.3	1315.5
7.5°	1303.6	1303.6	1300.0	1307.2	1308.4
10°	1290.5	1291.7	1290.5	1298.8	1300.0
12.5°	1273.8	1276.2	1277.4	1285.7	1286.9
15°	1253.6	1257.2	1259.6	1270.3	1272.6
17.5°	1231.0	1234.6	1240.5	1252.4	1254.8
20°	1203.6	1208.4	1215.5	1231.0	1234.6
22.5°	1173.8	1178.6	1190.5	1204.8	1210.7
25°	1139.3	1148.8	1160.7	1179.8	1183.4
27.5°	1104.8	1113.1	1128.6	1148.8	1153.6
30°	1064.3	1077.4	1096.5	1116.7	1121.5
32.5°	1025.0	1038.1	1060.7	1082.2	1088.1
35°	984.5	996.5	1020.3	1045.3	1052.4
37.5°	938.1	953.6	979.8	1004.8	1011.9
40°	889.3	908.4	938.1	964.3	972.6
42.5°	842.9	863.1	892.9	921.4	931.0
45°	794.1	813.1	848.8	881.0	888.1
47.5°	744.1	765.5	803.6	835.7	847.6
50°	694.1	716.7	757.2	790.5	797.6
52.5°	644.1	667.9	710.7	746.4	750.0
55°	591.7	617.9	663.1	697.6	704.8
57.5°	544.1	566.7	615.5	651.2	659.5
60°	491.7	516.7	569.1	602.4	613.1
62.5°	441.7	467.9	522.6	556.0	565.5
65°	389.3	419.1	472.6	511.9	521.4
67.5°	344.1	372.6	429.8	467.9	477.4
70°	291.7	323.8	384.5	423.8	433.3
72.5°	246.4	279.8	340.5	378.6	392.9
75°	197.6	235.7	296.4	336.9	346.4
77.5°	150.0	194.1	256.0	286.9	286.9
80°	107.1	153.6	210.7	225.0	227.4
82.5°	70.2	115.5	156.0	154.8	154.8
85°	40.5	75.0	92.9	90.5	90.5
87.5°	15.5	31.0	33.3	33.3	32.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)