

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: P276320

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276320
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: 24CZ2-35HE-S-UNV-L83050-W2A1-U-4500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3708.0 lumens
Efficiency: N/A
Efficacy: 146.2 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

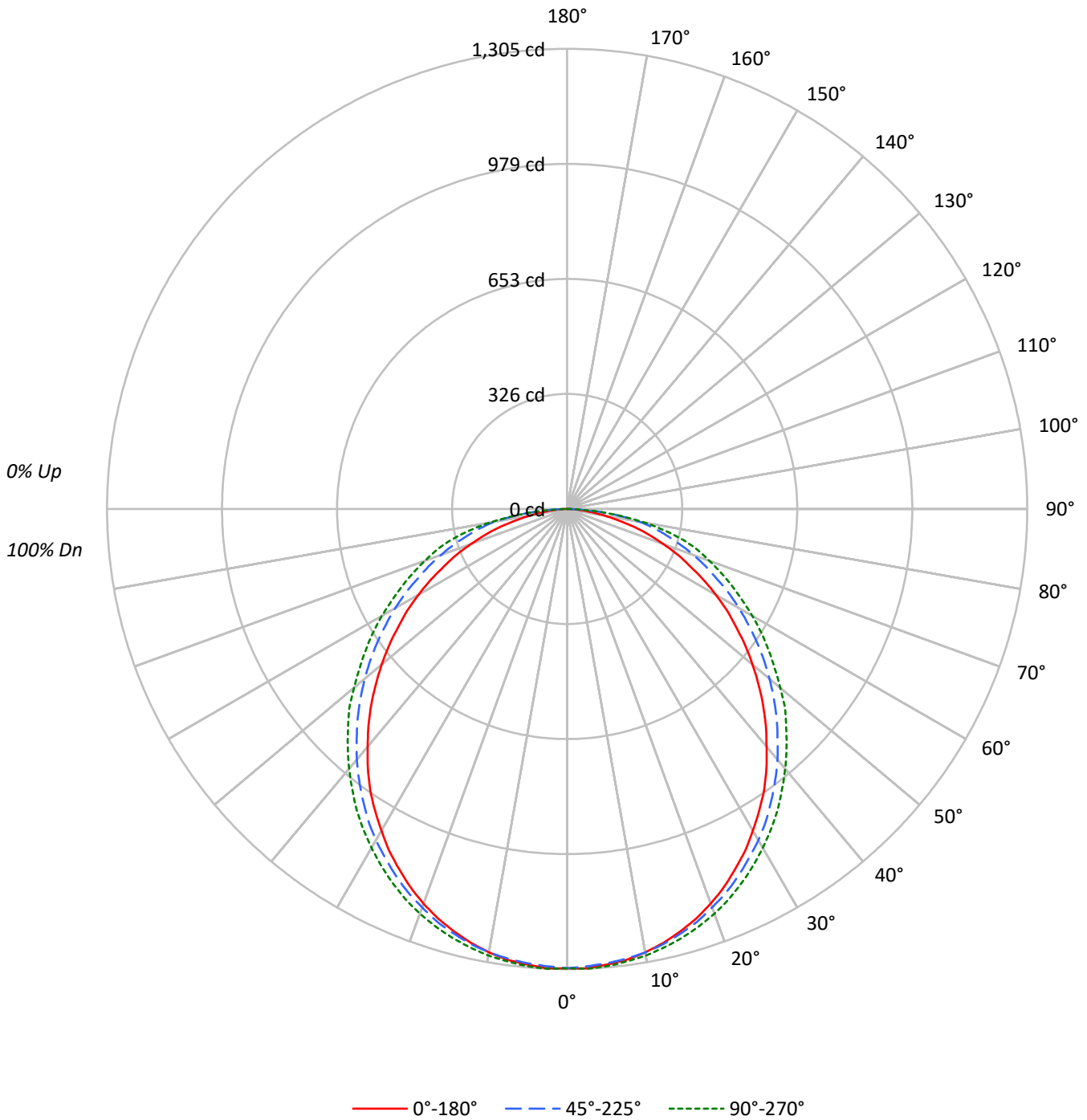
Input Watts (W): 25.36482
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1753	1753	1753
5°	1751	1747	1758
10°	1744	1744	1757
15°	1728	1736	1754
20°	1705	1722	1749
25°	1673	1705	1738
30°	1636	1685	1724
35°	1600	1658	1710
40°	1545	1630	1690
45°	1495	1598	1672
50°	1437	1568	1652
55°	1373	1539	1636
60°	1309	1515	1632
65°	1226	1489	1642
70°	1135	1496	1686
75°	1016	1525	1782
80°	821	1616	1743
85°	618	1419	1382



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.3	3.3
10°-20°	352.4	9.5
20°-30°	529.7	14.3
30°-40°	631.0	17.0
40°-50°	645.8	17.4
50°-60°	581.4	15.7
60°-70°	456.6	12.3
70°-80°	296.3	8.0
80°-90°	91.6	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°	1005.4	27.1
0°-40°	1636.4	44.1
0°-60°	2863.5	77.2
0°-90°	3708.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3708.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1297	1299	1293	1300	1302	123
15°	1240	1244	1246	1257	1259	350
25°	1127	1137	1148	1167	1171	519
35°	974	986	1009	1034	1041	608
45°	786	804	840	872	879	606
55°	585	611	656	690	697	525
65°	385	415	468	506	516	383
75°	196	233	293	333	343	207
85°	40	74	92	90	90	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.6	1302.6	1302.6	1302.6	1302.6
2.5°	1303.8	1303.8	1297.9	1303.8	1305.0
5°	1296.8	1299.1	1293.2	1300.3	1301.5
7.5°	1289.7	1289.7	1286.2	1293.2	1294.4
10°	1276.7	1277.9	1276.7	1285.0	1286.2
12.5°	1260.2	1262.6	1263.8	1272.0	1273.2
15°	1240.2	1243.8	1246.1	1256.7	1259.1
17.5°	1217.8	1221.4	1227.3	1239.0	1241.4
20°	1190.8	1195.5	1202.5	1217.8	1221.4
22.5°	1161.3	1166.0	1177.8	1191.9	1197.8
25°	1127.2	1136.6	1148.4	1167.2	1170.7
27.5°	1093.0	1101.2	1116.6	1136.6	1141.3
30°	1053.0	1065.9	1084.8	1104.8	1109.5
32.5°	1014.1	1027.0	1049.4	1070.6	1076.5
35°	974.0	985.8	1009.4	1034.1	1041.2
37.5°	928.1	943.4	969.3	994.1	1001.1
40°	879.8	898.7	928.1	954.0	962.3
42.5°	833.9	853.9	883.3	911.6	921.0
45°	785.6	804.4	839.8	871.6	878.6
47.5°	736.1	757.3	795.0	826.8	838.6
50°	686.7	709.0	749.1	782.1	789.1
52.5°	637.2	660.7	703.1	738.5	742.0
55°	585.4	611.3	656.0	690.2	697.3
57.5°	538.3	560.6	608.9	644.3	652.5
60°	486.4	511.2	563.0	596.0	606.6
62.5°	437.0	462.9	517.1	550.0	559.5
65°	385.1	414.6	467.6	506.5	515.9
67.5°	340.4	368.7	425.2	462.9	472.3
70°	288.6	320.4	380.4	419.3	428.7
72.5°	243.8	276.8	336.9	374.5	388.7
75°	195.5	233.2	293.3	333.3	342.7
77.5°	148.4	192.0	253.2	283.8	283.8
80°	106.0	151.9	208.5	222.6	225.0
82.5°	69.5	114.2	154.3	153.1	153.1
85°	40.0	74.2	91.9	89.5	89.5
87.5°	15.3	30.6	33.0	33.0	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)