

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: P275983

Luminaire Tested: **24CZ2-45HE-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P275983
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: 24CZ2-45HE-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3606.4 lumens
Efficiency: N/A
Efficacy: 112.6 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

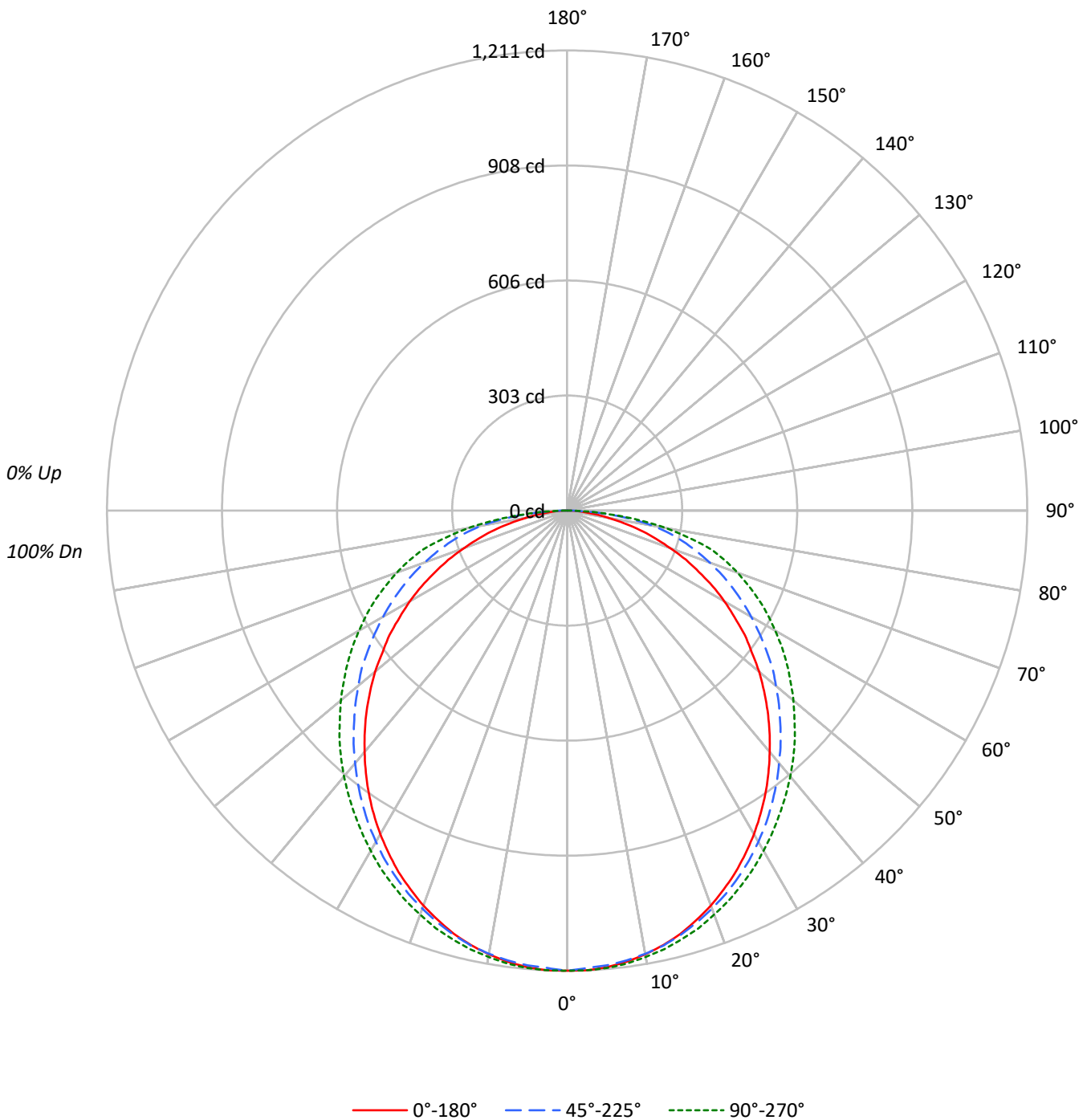
Input Watts (W): 32.031246
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1629	1629	1629
5°	1629	1622	1632
10°	1620	1618	1630
15°	1606	1610	1626
20°	1584	1596	1620
25°	1558	1581	1614
30°	1528	1563	1606
35°	1495	1544	1601
40°	1457	1524	1604
45°	1420	1509	1612
50°	1381	1502	1627
55°	1338	1499	1657
60°	1286	1506	1700
65°	1218	1529	1774
70°	1132	1567	1875
75°	1032	1645	2034
80°	848	1772	2033
85°	650	1635	1746



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	3.2
10°-20°	326.9	9.1
20°-30°	492.0	13.6
30°-40°	589.6	16.3
40°-50°	614.4	17.0
50°-60°	571.6	15.9
60°-70°	470.8	13.1
70°-80°	320.6	8.9
80°-90°	105.9	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°	933.4	25.9
0°-40°	1523.0	42.2
0°-60°	2709.1	75.1
0°-90°	3606.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3606.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1211	1211	1211	1211	1211	
5°	1206	1206	1201	1207	1208	114
15°	1153	1154	1156	1166	1168	325
25°	1050	1054	1065	1083	1087	483
35°	910	921	940	965	975	569
45°	746	762	793	833	847	576
55°	570	590	639	690	706	509
65°	383	415	480	537	557	380
75°	199	243	316	373	391	209
85°	42	82	106	113	113	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1210.8	1210.8	1210.8	1210.8	1210.8
2.5°	1210.8	1210.8	1204.8	1210.8	1210.8
5°	1206.0	1206.0	1201.2	1207.2	1208.4
7.5°	1197.6	1198.8	1194.0	1201.2	1202.4
10°	1185.6	1186.8	1184.4	1191.6	1192.8
12.5°	1171.1	1172.3	1172.3	1180.7	1181.9
15°	1153.1	1154.3	1155.5	1166.3	1167.5
17.5°	1130.2	1133.8	1136.2	1149.4	1151.9
20°	1106.1	1109.7	1114.5	1129.0	1131.4
22.5°	1078.4	1083.2	1091.7	1107.3	1110.9
25°	1049.5	1054.4	1065.2	1083.2	1086.9
27.5°	1017.1	1024.3	1037.5	1056.8	1061.6
30°	983.3	990.6	1006.2	1026.7	1033.9
32.5°	947.2	956.9	974.9	997.8	1005.0
35°	909.9	920.8	940.0	965.3	974.9
37.5°	870.2	882.2	905.1	932.8	944.8
40°	829.3	843.7	867.8	900.3	913.5
42.5°	788.4	801.6	831.7	866.6	881.0
45°	746.2	761.9	793.2	832.9	847.3
47.5°	702.9	718.6	755.9	798.0	811.2
50°	659.6	675.2	717.4	761.9	777.5
52.5°	612.6	633.1	681.2	725.8	741.4
55°	570.5	589.8	639.1	689.7	706.5
57.5°	522.4	545.2	599.4	652.4	670.4
60°	477.8	501.9	559.7	613.8	631.9
62.5°	432.1	458.6	520.0	575.3	595.8
65°	382.7	415.2	480.2	536.8	557.3
67.5°	338.2	371.9	440.5	498.3	516.3
70°	287.7	328.6	398.4	456.2	476.6
72.5°	244.3	285.3	358.7	415.2	435.7
75°	198.6	243.1	316.5	373.1	391.2
77.5°	152.9	202.2	275.6	319.0	325.0
80°	109.5	161.3	228.7	254.0	262.4
82.5°	77.0	124.0	168.5	185.4	190.2
85°	42.1	81.8	105.9	113.1	113.1
87.5°	18.1	34.9	42.1	43.3	44.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)