

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: P260644

Luminaire Tested: **24CZ-LD5-45-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260644
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4117.2 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

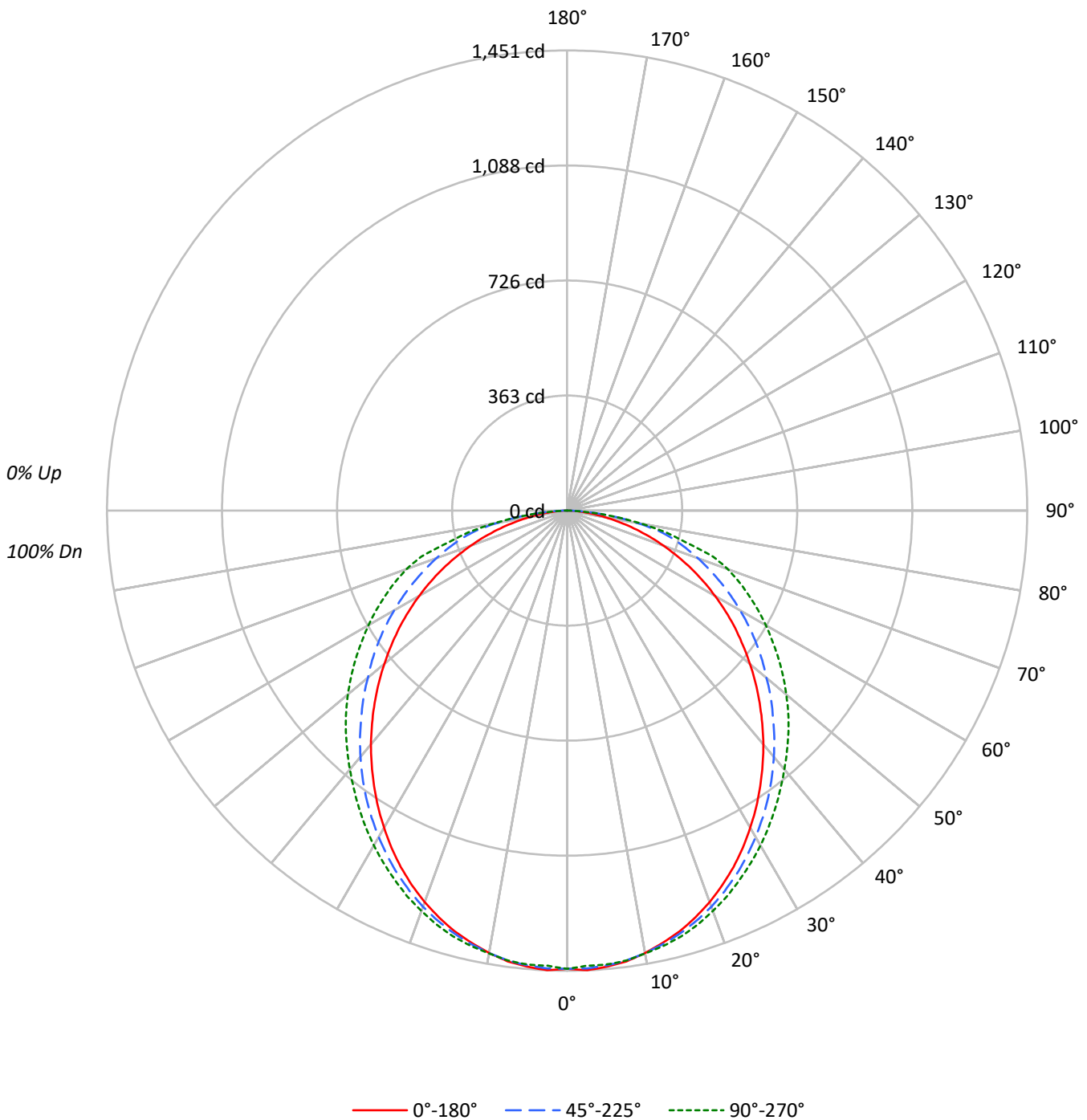
Input Watts (W): 32.251284
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1944	1944	1944
5°	1950	1944	1940
10°	1936	1936	1937
15°	1913	1922	1936
20°	1881	1903	1924
25°	1842	1877	1909
30°	1794	1846	1895
35°	1744	1815	1880
40°	1691	1780	1872
45°	1634	1746	1878
50°	1576	1717	1888
55°	1518	1706	1908
60°	1449	1696	1946
65°	1373	1697	2011
70°	1270	1725	2118
75°	1136	1803	2015
80°	950	1726	1846
85°	718	1328	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.5	3.3
10°-20°	388.6	9.4
20°-30°	581.0	14.1
30°-40°	689.2	16.7
40°-50°	709.4	17.2
50°-60°	650.7	15.8
60°-70°	526.2	12.8
70°-80°	341.5	8.3
80°-90°	94.2	2.3
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°	1106.1	26.9
0°-40°	1795.3	43.6
0°-60°	3155.4	76.6
0°-90°	4117.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4117.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1444	1434	1439	1438	1436	137
15°	1373	1367	1380	1386	1390	387
25°	1240	1242	1264	1276	1286	571
35°	1062	1070	1105	1129	1145	664
45°	858	873	918	961	987	663
55°	647	667	727	787	813	578
65°	431	457	533	603	632	426
75°	218	259	347	388	388	232
85°	46	79	86	83	82	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.9	1444.9	1444.9	1444.9	1444.9
2.5°	1450.6	1439.3	1444.9	1443.5	1436.5
5°	1443.5	1433.7	1439.3	1437.9	1436.5
7.5°	1433.7	1423.8	1430.8	1429.4	1430.8
10°	1416.7	1408.3	1416.7	1418.1	1418.1
12.5°	1395.6	1388.5	1399.8	1402.6	1405.5
15°	1373.0	1367.4	1380.1	1385.7	1390.0
17.5°	1344.8	1340.6	1356.1	1363.2	1368.8
20°	1313.8	1312.4	1329.3	1336.4	1343.4
22.5°	1278.6	1278.6	1298.3	1306.8	1316.7
25°	1240.5	1241.9	1264.5	1275.8	1285.6
27.5°	1199.6	1201.1	1227.8	1241.9	1253.2
30°	1154.5	1160.2	1188.4	1206.7	1219.4
32.5°	1109.4	1116.5	1147.5	1168.6	1182.7
35°	1061.5	1070.0	1105.2	1129.2	1144.7
37.5°	1012.2	1022.0	1060.1	1086.9	1105.2
40°	962.8	974.1	1013.6	1044.6	1065.7
42.5°	910.7	923.3	967.0	1003.7	1026.3
45°	858.5	872.6	917.7	961.4	986.8
47.5°	806.3	823.3	871.2	919.1	945.9
50°	752.8	769.7	820.4	875.4	902.2
52.5°	699.2	718.9	775.3	831.7	858.5
55°	647.0	666.8	727.4	786.6	813.4
57.5°	593.5	613.2	679.5	741.5	768.3
60°	538.5	561.1	630.1	693.6	723.2
62.5°	484.9	508.9	582.2	649.9	678.1
65°	431.4	456.7	532.9	603.3	631.5
67.5°	376.4	406.0	484.9	556.8	586.4
70°	322.8	355.2	438.4	510.3	538.5
72.5°	270.7	305.9	391.9	465.2	482.1
75°	218.5	259.4	346.8	387.7	387.7
77.5°	169.2	214.3	296.0	311.5	320.0
80°	122.6	172.0	222.7	241.1	238.2
82.5°	81.8	131.1	159.3	159.3	155.1
85°	46.5	78.9	86.0	83.2	81.8
87.5°	19.7	29.6	26.8	21.1	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)