

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: P260976

Luminaire Tested: **24CZ-LD5-30-S-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-30-S-UNV-L83050-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3319.0 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

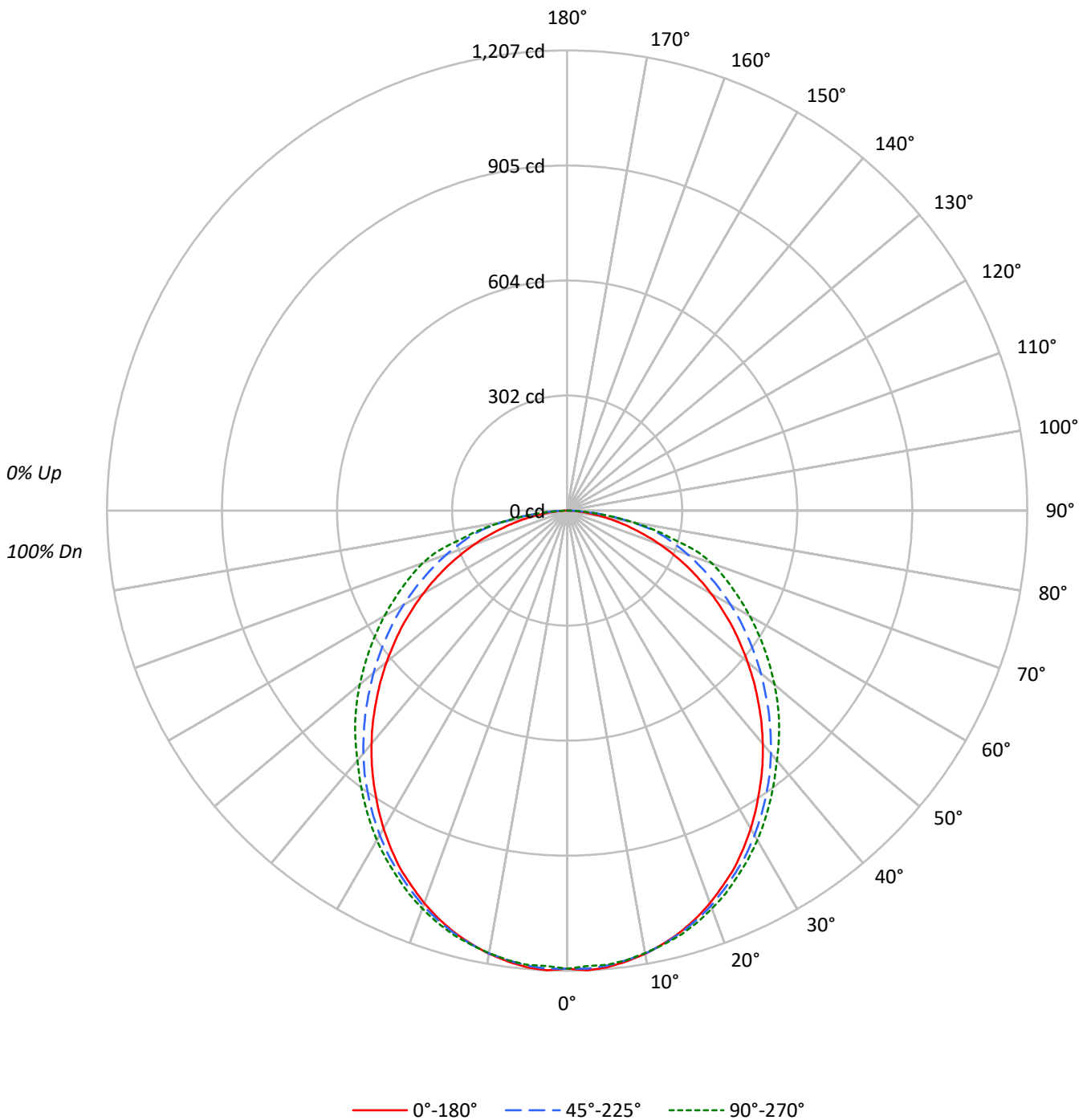
Input Watts (W): 20.584527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1617	1617	1617
5°	1624	1618	1615
10°	1613	1611	1610
15°	1595	1598	1604
20°	1569	1580	1591
25°	1538	1554	1571
30°	1496	1527	1551
35°	1449	1495	1526
40°	1402	1461	1503
45°	1349	1423	1496
50°	1294	1387	1486
55°	1238	1358	1482
60°	1174	1334	1489
65°	1104	1318	1519
70°	1017	1325	1590
75°	901	1372	1481
80°	753	1301	1335
85°	562	1041	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.6	3.4
10°-20°	323.1	9.7
20°-30°	481.5	14.5
30°-40°	566.8	17.1
40°-50°	576.0	17.4
50°-60°	517.8	15.6
60°-70°	409.1	12.3
70°-80°	259.5	7.8
80°-90°	71.6	2.2
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°	918.2	27.7
0°-40°	1484.9	44.7
0°-60°	2578.7	77.7
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1202	1202	1202	1202	1202	
5°	1203	1193	1198	1196	1196	114
15°	1145	1140	1147	1151	1152	323
25°	1036	1035	1047	1054	1058	476
35°	882	888	910	920	929	552
45°	709	719	748	770	786	547
55°	528	541	579	616	632	471
65°	347	364	414	459	477	343
75°	173	203	264	287	285	185
85°	36	63	67	62	62	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1201.5	1201.5	1201.5	1201.5	1201.5
2.5°	1207.1	1198.2	1202.6	1200.4	1196.0
5°	1202.6	1192.7	1198.2	1196.0	1196.0
7.5°	1192.7	1185.0	1189.4	1188.3	1189.4
10°	1180.6	1172.8	1179.5	1179.5	1178.3
12.5°	1164.0	1157.4	1165.1	1165.1	1166.2
15°	1145.2	1139.7	1147.4	1150.7	1151.8
17.5°	1122.0	1116.5	1126.4	1129.8	1133.1
20°	1095.5	1093.3	1103.3	1106.6	1111.0
22.5°	1065.7	1065.7	1075.6	1080.1	1086.7
25°	1035.9	1034.8	1046.9	1053.6	1058.0
27.5°	1000.5	1001.7	1017.1	1023.7	1029.3
30°	963.0	965.2	982.9	990.6	998.3
32.5°	923.2	927.7	947.5	956.4	964.1
35°	882.4	887.9	910.0	919.9	928.8
37.5°	841.5	849.2	872.4	882.4	892.3
40°	798.4	805.1	831.6	843.7	855.9
42.5°	754.3	763.1	789.6	807.3	821.6
45°	709.0	718.9	747.6	769.7	786.3
47.5°	663.7	677.0	704.6	734.4	748.8
50°	618.4	631.7	662.6	695.7	710.1
52.5°	572.1	585.3	620.6	654.9	670.3
55°	527.9	541.1	578.7	616.2	631.7
57.5°	481.5	495.9	537.8	576.5	591.9
60°	436.2	450.6	495.9	536.7	553.3
62.5°	392.0	407.5	455.0	498.1	514.6
65°	346.8	364.4	414.1	459.4	477.1
67.5°	302.6	322.5	374.4	421.9	440.6
70°	258.4	281.6	336.8	385.4	404.2
72.5°	215.3	240.7	299.3	347.9	357.8
75°	173.4	203.2	263.9	287.1	284.9
77.5°	133.6	166.8	224.2	228.6	235.2
80°	97.2	133.6	167.9	176.7	172.3
82.5°	64.1	100.5	120.4	116.0	114.9
85°	36.4	62.9	67.4	61.8	61.8
87.5°	15.5	25.4	22.1	16.6	15.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)