

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: P260973

Luminaire Tested: **24CZ-LD5-30-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260973
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-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3131.0 lumens
Efficiency: N/A
Efficacy: 159.6 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

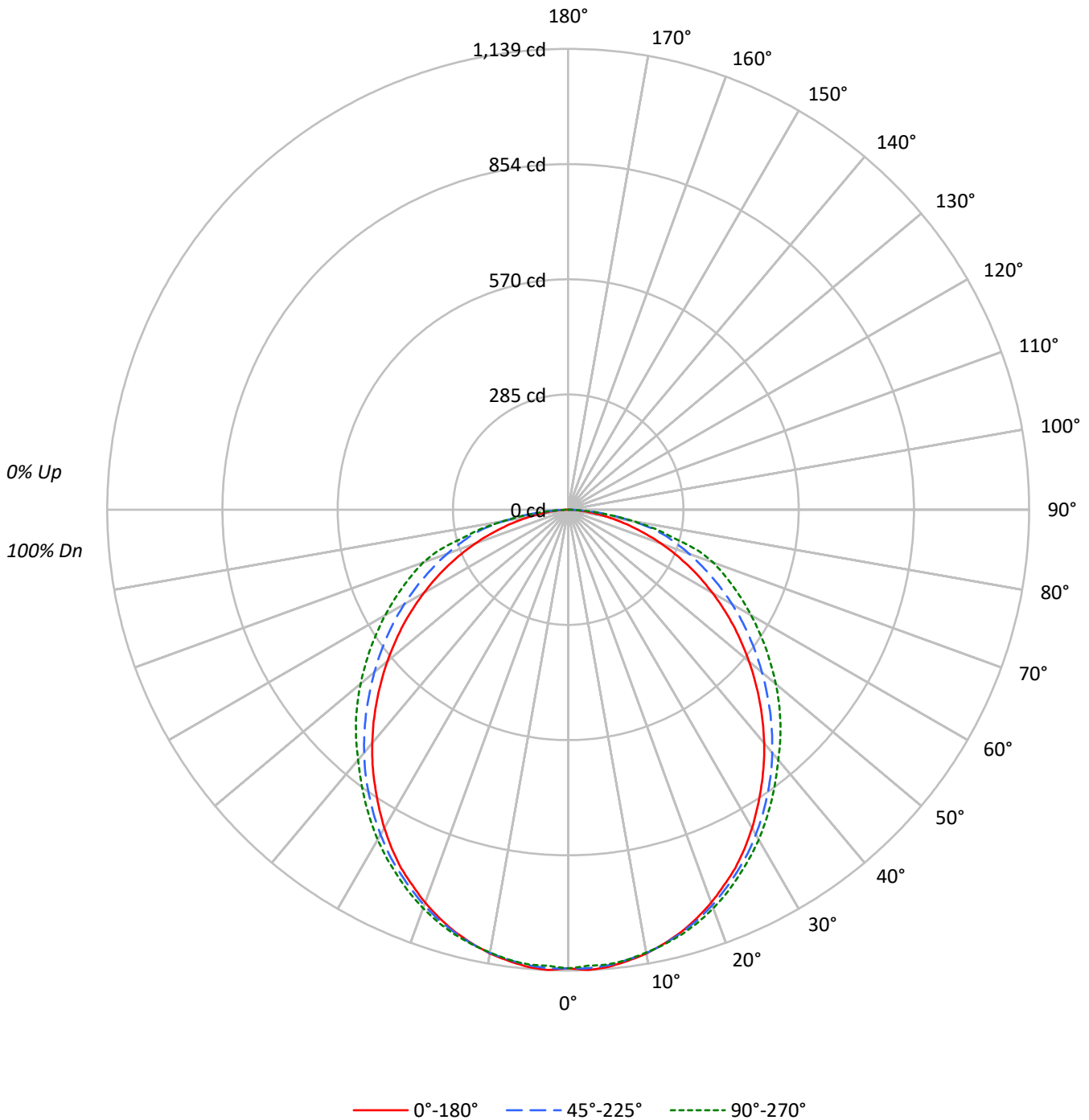
Input Watts (W): 19.623
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1525	1525	1525
5°	1532	1527	1524
10°	1522	1520	1519
15°	1505	1508	1514
20°	1480	1490	1501
25°	1451	1466	1482
30°	1411	1441	1463
35°	1367	1410	1439
40°	1323	1378	1418
45°	1273	1342	1412
50°	1221	1308	1402
55°	1168	1281	1398
60°	1107	1259	1404
65°	1041	1244	1433
70°	959	1250	1500
75°	850	1294	1397
80°	711	1227	1259
85°	531	980	900



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.2	3.4
10°-20°	304.8	9.7
20°-30°	454.2	14.5
30°-40°	534.7	17.1
40°-50°	543.3	17.4
50°-60°	488.5	15.6
60°-70°	385.9	12.3
70°-80°	244.8	7.8
80°-90°	67.6	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°	866.2	27.7
0°-40°	1400.8	44.7
0°-60°	2432.7	77.7
0°-90°	3131.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3131.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1134	1134	1134	1134	1134	
5°	1134	1125	1130	1128	1128	108
15°	1080	1075	1082	1086	1087	304
25°	977	976	988	994	998	449
35°	832	838	858	868	876	521
45°	669	678	705	726	742	516
55°	498	510	546	581	596	445
65°	327	344	391	433	450	324
75°	164	192	249	271	269	174
85°	34	59	64	58	58	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1133.5	1133.5	1133.5	1133.5	1133.5
2.5°	1138.7	1130.4	1134.5	1132.4	1128.3
5°	1134.5	1125.1	1130.4	1128.3	1128.3
7.5°	1125.1	1117.9	1122.0	1121.0	1122.0
10°	1113.7	1106.4	1112.6	1112.6	1111.6
12.5°	1098.1	1091.8	1099.1	1099.1	1100.1
15°	1080.3	1075.1	1082.4	1085.6	1086.6
17.5°	1058.5	1053.3	1062.6	1065.8	1068.9
20°	1033.5	1031.4	1040.8	1043.9	1048.1
22.5°	1005.3	1005.3	1014.7	1018.9	1025.1
25°	977.2	976.2	987.6	993.9	998.0
27.5°	943.9	944.9	959.5	965.7	971.0
30°	908.5	910.5	927.2	934.5	941.8
32.5°	870.9	875.1	893.9	902.2	909.5
35°	832.4	837.6	858.4	867.8	876.2
37.5°	793.9	801.1	823.0	832.4	841.8
40°	753.2	759.5	784.5	795.9	807.4
42.5°	711.6	719.9	744.9	761.6	775.1
45°	668.8	678.2	705.3	726.1	741.8
47.5°	626.1	638.6	664.7	692.8	706.3
50°	583.4	595.9	625.1	656.3	669.9
52.5°	539.7	552.2	585.5	617.8	632.4
55°	498.0	510.5	545.9	581.3	595.9
57.5°	454.2	467.8	507.4	543.8	558.4
60°	411.5	425.1	467.8	506.3	521.9
62.5°	369.8	384.4	429.2	469.9	485.5
65°	327.1	343.8	390.7	433.4	450.1
67.5°	285.5	304.2	353.2	398.0	415.7
70°	243.8	265.7	317.7	363.6	381.3
72.5°	203.2	227.1	282.3	328.2	337.5
75°	163.6	191.7	249.0	270.9	268.8
77.5°	126.1	157.3	211.5	215.7	221.9
80°	91.7	126.1	158.4	166.7	162.5
82.5°	60.4	94.8	113.6	109.4	108.3
85°	34.4	59.4	63.5	58.3	58.3
87.5°	14.6	24.0	20.8	15.6	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)