

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: P260810

Luminaire Tested: **24CZ-LD5-40SE-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260810
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-LD5-40SE-UNV-L82765-W2A1-U-2700K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3714.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

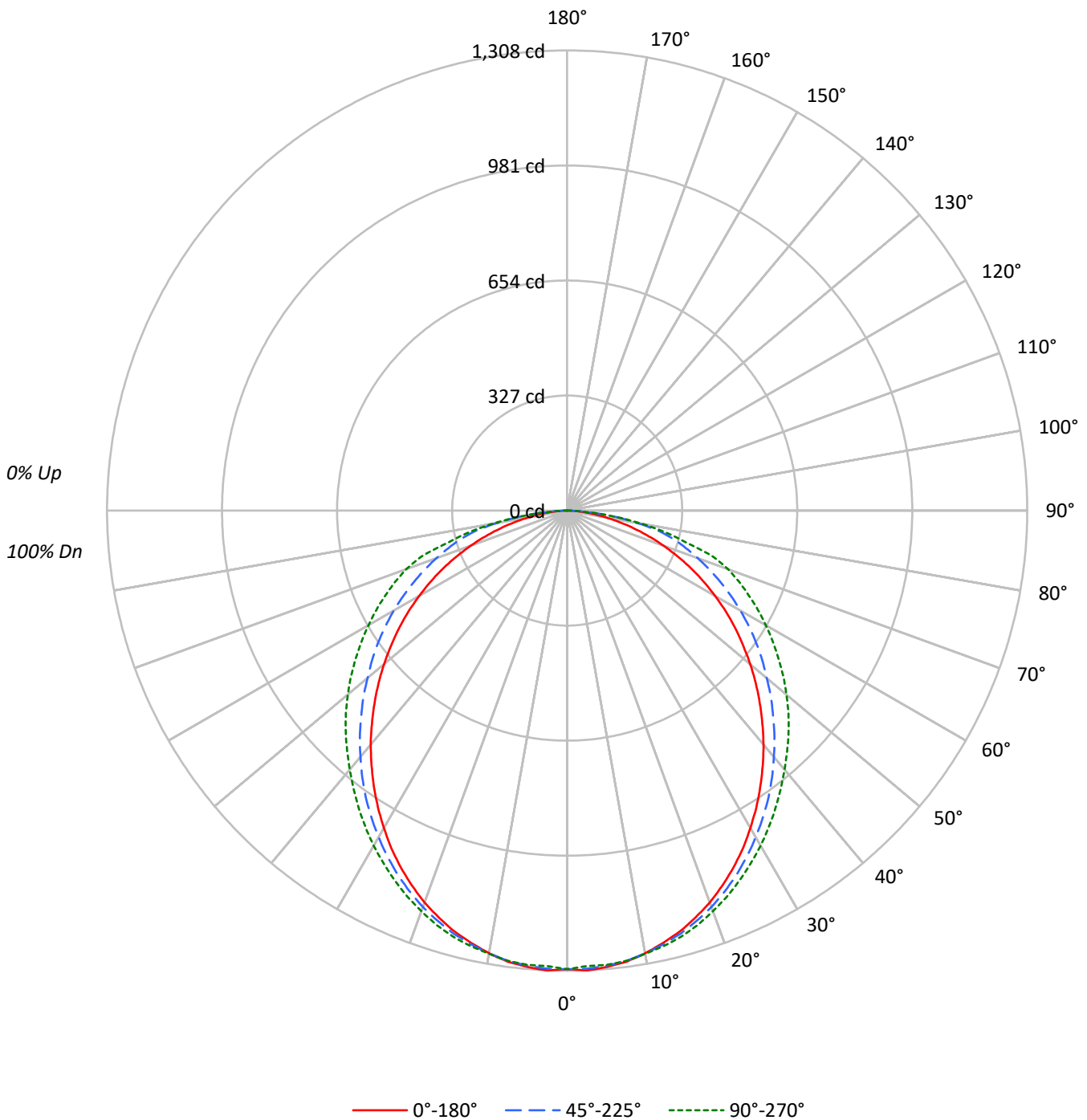
Input Watts (W): 30.411
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1754	1754	1754
5°	1759	1754	1750
10°	1746	1746	1748
15°	1725	1734	1746
20°	1697	1717	1735
25°	1661	1693	1722
30°	1618	1665	1709
35°	1573	1638	1696
40°	1525	1606	1689
45°	1474	1575	1694
50°	1421	1549	1703
55°	1369	1539	1721
60°	1307	1530	1755
65°	1239	1530	1814
70°	1146	1556	1911
75°	1025	1626	1818
80°	857	1557	1665
85°	648	1198	1139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	3.3
10°-20°	350.6	9.4
20°-30°	524.1	14.1
30°-40°	621.7	16.7
40°-50°	639.9	17.2
50°-60°	587.0	15.8
60°-70°	474.6	12.8
70°-80°	308.0	8.3
80°-90°	84.9	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°	997.8	26.9
0°-40°	1619.5	43.6
0°-60°	2846.4	76.6
0°-90°	3714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1302	1293	1298	1297	1296	124
15°	1239	1234	1245	1250	1254	349
25°	1119	1120	1141	1151	1160	515
35°	958	965	997	1019	1033	599
45°	774	787	828	867	890	598
55°	584	602	656	710	734	521
65°	389	412	481	544	570	385
75°	197	234	313	350	350	210
85°	42	71	78	75	74	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1303.4	1303.4	1303.4	1303.4	1303.4
2.5°	1308.5	1298.3	1303.4	1302.1	1295.8
5°	1302.1	1293.2	1298.3	1297.1	1295.8
7.5°	1293.2	1284.3	1290.7	1289.4	1290.7
10°	1278.0	1270.4	1278.0	1279.3	1279.3
12.5°	1258.9	1252.6	1262.7	1265.3	1267.8
15°	1238.6	1233.5	1244.9	1250.0	1253.8
17.5°	1213.1	1209.3	1223.3	1229.7	1234.8
20°	1185.2	1183.9	1199.1	1205.5	1211.9
22.5°	1153.4	1153.4	1171.2	1178.8	1187.7
25°	1119.0	1120.3	1140.7	1150.8	1159.7
27.5°	1082.2	1083.4	1107.6	1120.3	1130.5
30°	1041.5	1046.6	1072.0	1088.5	1100.0
32.5°	1000.8	1007.1	1035.1	1054.2	1066.9
35°	957.5	965.2	997.0	1018.6	1032.6
37.5°	913.0	921.9	956.3	980.4	997.0
40°	868.5	878.7	914.3	942.3	961.4
42.5°	821.5	832.9	872.3	905.4	925.7
45°	774.4	787.1	827.8	867.3	890.1
47.5°	727.4	742.6	785.9	829.1	853.3
50°	679.1	694.3	740.1	789.7	813.8
52.5°	630.7	648.5	699.4	750.3	774.4
55°	583.7	601.5	656.2	709.6	733.7
57.5°	535.4	553.2	612.9	668.9	693.0
60°	485.8	506.1	568.4	625.6	652.3
62.5°	437.4	459.1	525.2	586.2	611.7
65°	389.1	412.0	480.7	544.3	569.7
67.5°	339.5	366.2	437.4	502.3	529.0
70°	291.2	320.5	395.5	460.3	485.8
72.5°	244.2	275.9	353.5	419.6	434.9
75°	197.1	234.0	312.8	349.7	349.7
77.5°	152.6	193.3	267.0	281.0	288.7
80°	110.6	155.1	200.9	217.4	214.9
82.5°	73.8	118.3	143.7	143.7	139.9
85°	42.0	71.2	77.6	75.0	73.8
87.5°	17.8	26.7	24.2	19.1	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)