

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: P260983

Luminaire Tested: **24CZ-LD5-40-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260983
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-LD5-40-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: 4154.0 lumens
Efficiency: N/A
Efficacy: 146.9 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

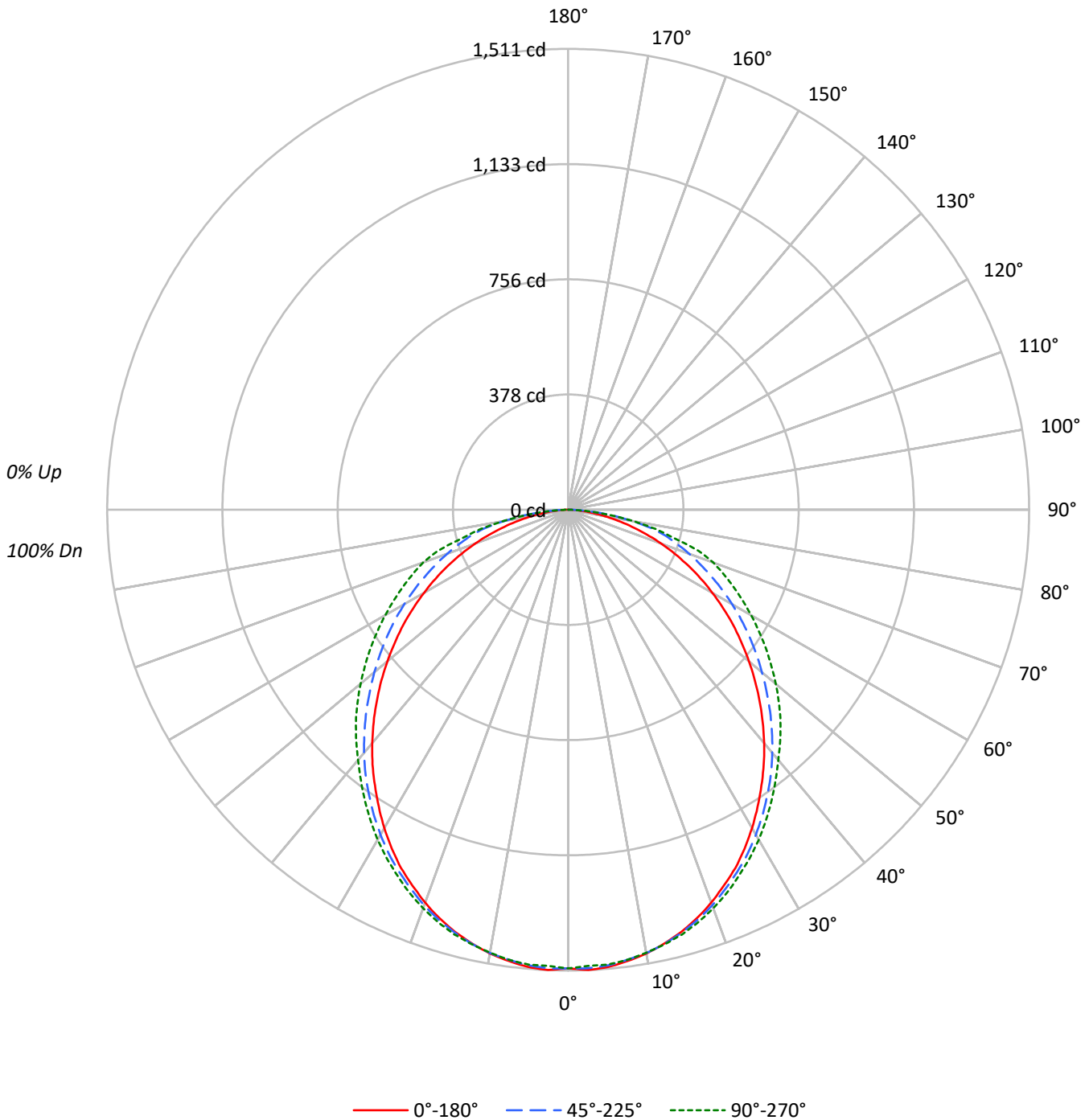
Input Watts (W): 28.272
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2023	2023	2023
5°	2033	2026	2022
10°	2019	2017	2015
15°	1997	2000	2008
20°	1963	1977	1991
25°	1925	1945	1966
30°	1873	1911	1941
35°	1814	1871	1909
40°	1755	1828	1881
45°	1689	1780	1873
50°	1620	1736	1860
55°	1550	1699	1855
60°	1469	1670	1864
65°	1382	1650	1901
70°	1272	1659	1990
75°	1128	1717	1854
80°	942	1628	1671
85°	704	1301	1195



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.2	3.4
10°-20°	404.4	9.7
20°-30°	602.6	14.5
30°-40°	709.4	17.1
40°-50°	720.9	17.4
50°-60°	648.1	15.6
60°-70°	512.0	12.3
70°-80°	324.8	7.8
80°-90°	89.6	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°	1149.2	27.7
0°-40°	1858.5	44.7
0°-60°	3227.5	77.7
0°-90°	4154.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4154.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1504	1504	1504	1504	1504	
5°	1505	1493	1500	1497	1497	143
15°	1433	1426	1436	1440	1442	404
25°	1296	1295	1310	1319	1324	596
35°	1104	1111	1139	1151	1162	691
45°	887	900	936	963	984	685
55°	661	677	724	771	791	590
65°	434	456	518	575	597	430
75°	217	254	330	359	357	231
85°	46	79	84	77	77	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1503.8	1503.8	1503.8	1503.8	1503.8
2.5°	1510.7	1499.7	1505.2	1502.4	1496.9
5°	1505.2	1492.8	1499.7	1496.9	1496.9
7.5°	1492.8	1483.1	1488.6	1487.2	1488.6
10°	1477.6	1467.9	1476.2	1476.2	1474.8
12.5°	1456.8	1448.5	1458.2	1458.2	1459.6
15°	1433.3	1426.4	1436.1	1440.2	1441.6
17.5°	1404.3	1397.4	1409.8	1414.0	1418.1
20°	1371.1	1368.4	1380.8	1385.0	1390.5
22.5°	1333.8	1333.8	1346.3	1351.8	1360.1
25°	1296.5	1295.1	1310.3	1318.6	1324.1
27.5°	1252.3	1253.6	1273.0	1281.3	1288.2
30°	1205.3	1208.0	1230.2	1239.8	1249.5
32.5°	1155.5	1161.0	1185.9	1197.0	1206.7
35°	1104.4	1111.3	1138.9	1151.4	1162.4
37.5°	1053.2	1062.9	1091.9	1104.4	1116.8
40°	999.3	1007.6	1040.8	1056.0	1071.2
42.5°	944.0	955.1	988.3	1010.4	1028.4
45°	887.4	899.8	935.7	963.4	984.1
47.5°	830.7	847.3	881.8	919.2	937.1
50°	774.0	790.6	829.3	870.8	888.7
52.5°	716.0	732.6	776.8	819.6	839.0
55°	660.7	677.3	724.3	771.3	790.6
57.5°	602.6	620.6	673.1	721.5	740.9
60°	546.0	563.9	620.6	671.7	692.5
62.5°	490.7	510.0	569.5	623.4	644.1
65°	434.0	456.1	518.3	575.0	597.1
67.5°	378.7	403.6	468.6	528.0	551.5
70°	323.4	352.5	421.6	482.4	505.9
72.5°	269.5	301.3	374.6	435.4	447.8
75°	217.0	254.3	330.3	359.4	356.6
77.5°	167.2	208.7	280.6	286.1	294.4
80°	121.6	167.2	210.1	221.2	215.6
82.5°	80.2	125.8	150.7	145.1	143.7
85°	45.6	78.8	84.3	77.4	77.4
87.5°	19.4	31.8	27.6	20.7	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)