

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: P260614

Luminaire Tested: **24CZ-LD5-40SE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260614
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-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4250.0 lumens
Efficiency: N/A
Efficacy: 136.6 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

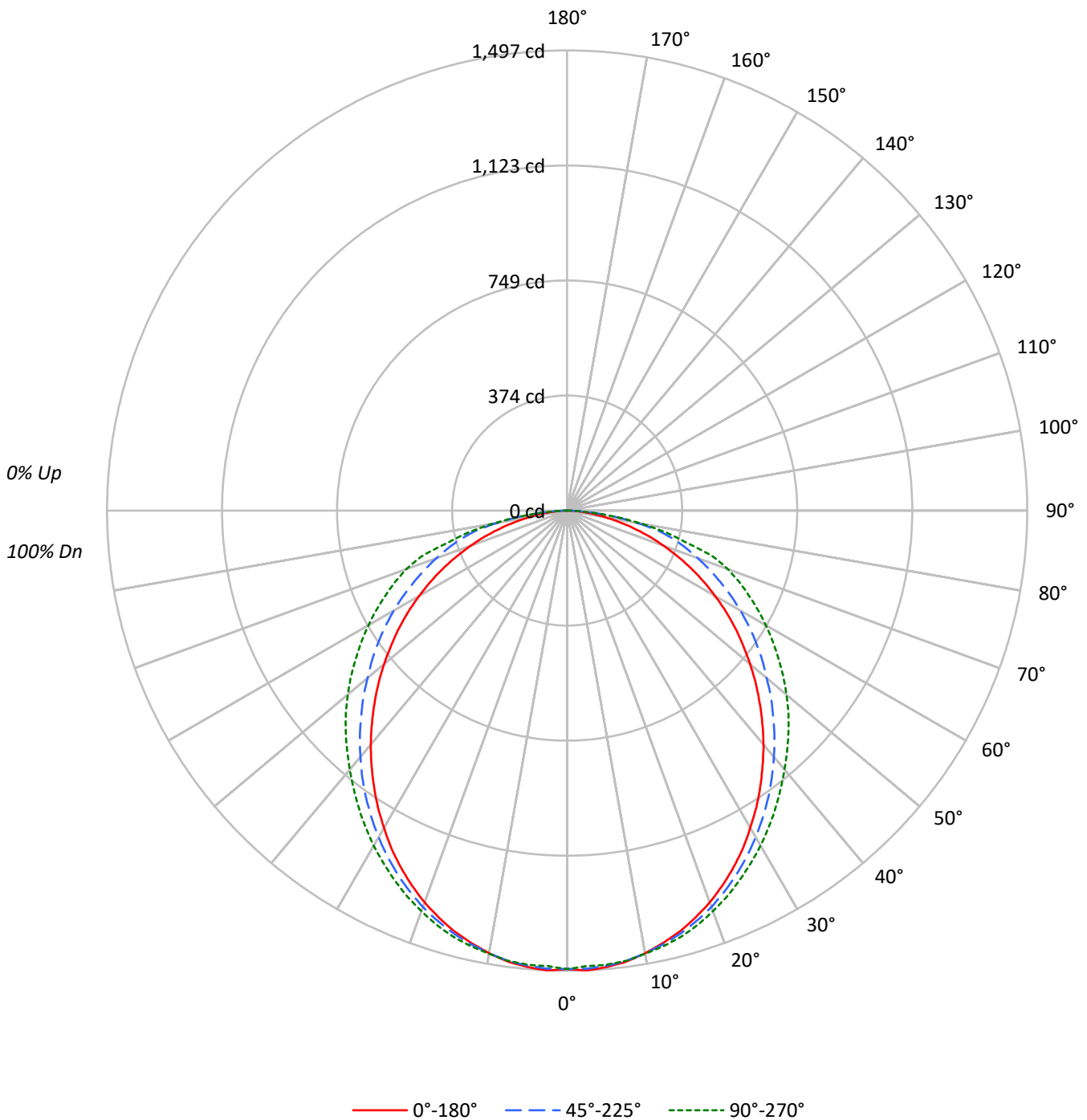
Input Watts (W): 31.110453
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2007	2007	2007
5°	2013	2007	2003
10°	1998	1998	2000
15°	1974	1984	1999
20°	1942	1965	1986
25°	1901	1938	1970
30°	1852	1906	1956
35°	1800	1874	1941
40°	1746	1838	1932
45°	1686	1803	1938
50°	1627	1773	1949
55°	1567	1761	1970
60°	1496	1750	2009
65°	1418	1751	2075
70°	1311	1781	2187
75°	1172	1861	2080
80°	981	1781	1905
85°	741	1371	1303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.9	3.3
10°-20°	401.1	9.4
20°-30°	599.7	14.1
30°-40°	711.4	16.7
40°-50°	732.2	17.2
50°-60°	671.7	15.8
60°-70°	543.1	12.8
70°-80°	352.5	8.3
80°-90°	97.2	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°	1141.8	26.9
0°-40°	1853.2	43.6
0°-60°	3257.2	76.6
0°-90°	4250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1492	1492	1492	1492	1492	
5°	1490	1480	1486	1484	1483	141
15°	1417	1412	1425	1430	1435	399
25°	1280	1282	1305	1317	1327	589
35°	1096	1104	1141	1166	1182	685
45°	886	901	947	992	1019	684
55°	668	688	751	812	840	597
65°	445	472	550	623	652	440
75°	226	268	358	400	400	240
85°	48	82	89	86	84	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.5	1491.5	1491.5	1491.5	1491.5
2.5°	1497.3	1485.7	1491.5	1490.1	1482.8
5°	1490.1	1479.9	1485.7	1484.3	1482.8
7.5°	1479.9	1469.7	1477.0	1475.5	1477.0
10°	1462.4	1453.7	1462.4	1463.9	1463.9
12.5°	1440.6	1433.3	1445.0	1447.9	1450.8
15°	1417.3	1411.5	1424.6	1430.4	1434.8
17.5°	1388.2	1383.8	1399.9	1407.1	1413.0
20°	1356.2	1354.7	1372.2	1379.5	1386.8
22.5°	1319.8	1319.8	1340.2	1348.9	1359.1
25°	1280.5	1282.0	1305.3	1316.9	1327.1
27.5°	1238.3	1239.8	1267.4	1282.0	1293.6
30°	1191.8	1197.6	1226.7	1245.6	1258.7
32.5°	1145.2	1152.5	1184.5	1206.3	1220.9
35°	1095.7	1104.5	1140.8	1165.6	1181.6
37.5°	1044.8	1055.0	1094.3	1121.9	1140.8
40°	993.9	1005.5	1046.3	1078.3	1100.1
42.5°	940.0	953.1	998.2	1036.1	1059.3
45°	886.2	900.7	947.3	992.4	1018.6
47.5°	832.3	849.8	899.3	948.8	976.4
50°	777.1	794.5	846.9	903.6	931.3
52.5°	721.8	742.1	800.3	858.5	886.2
55°	667.9	688.3	750.9	812.0	839.6
57.5°	612.6	633.0	701.4	765.4	793.1
60°	555.9	579.1	650.5	715.9	746.5
62.5°	500.6	525.3	601.0	670.8	699.9
65°	445.3	471.5	550.0	622.8	651.9
67.5°	388.5	419.1	500.6	574.8	605.3
70°	333.2	366.7	452.6	526.8	555.9
72.5°	279.4	315.8	404.5	480.2	497.7
75°	225.5	267.7	358.0	400.2	400.2
77.5°	174.6	221.2	305.6	321.6	330.3
80°	126.6	177.5	229.9	248.8	245.9
82.5°	84.4	135.3	164.4	164.4	160.1
85°	48.0	81.5	88.8	85.9	84.4
87.5°	20.4	30.6	27.6	21.8	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)