

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: P260985

Luminaire Tested: **24CZ-LD5-40-S-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260985
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-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4404.0 lumens
Efficiency: N/A
Efficacy: 148.5 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

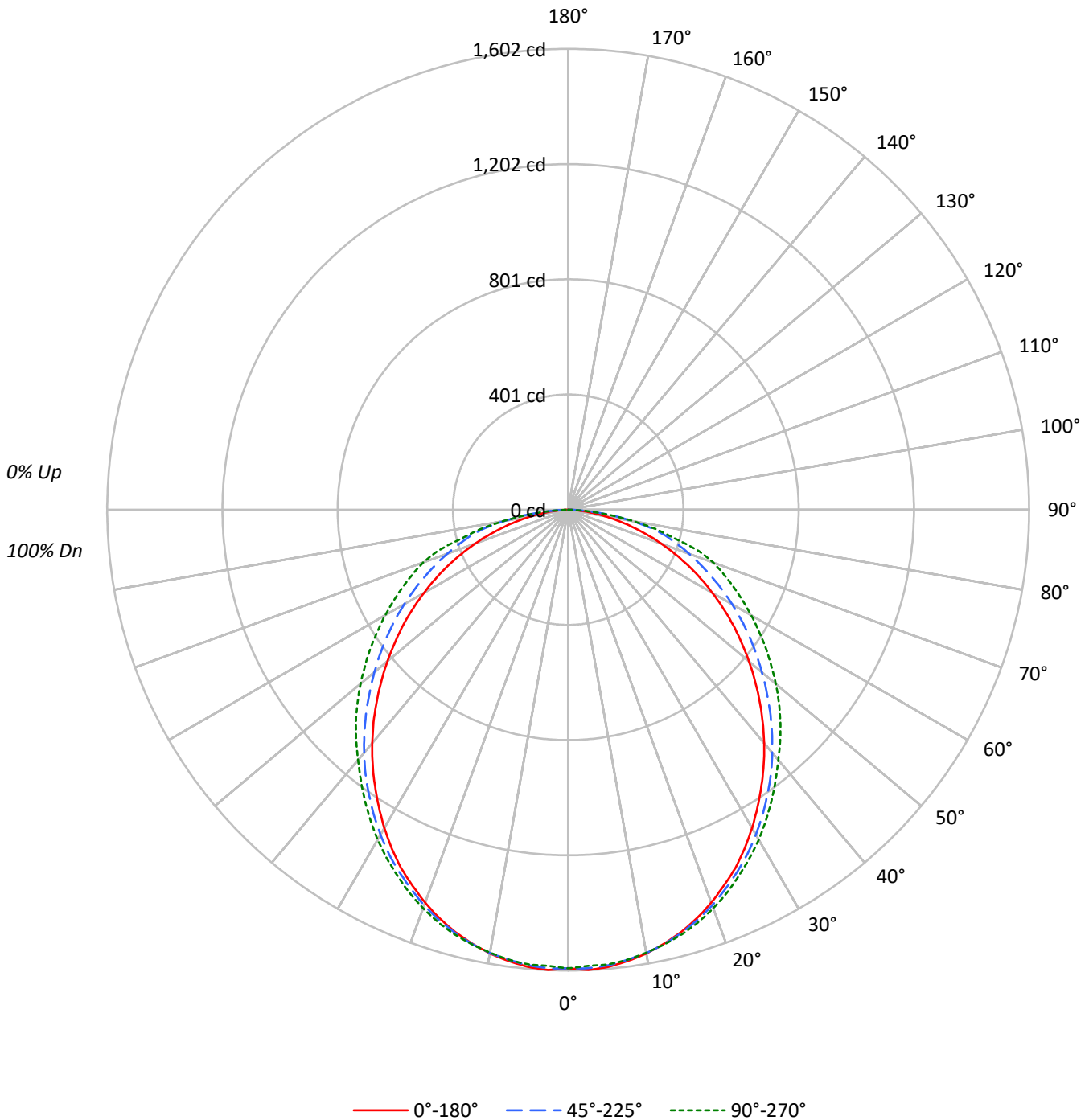
Input Watts (W): 29.657328
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2145	2145	2145
5°	2155	2147	2143
10°	2140	2138	2136
15°	2117	2121	2129
20°	2081	2096	2111
25°	2041	2062	2084
30°	1985	2026	2058
35°	1923	1983	2024
40°	1861	1938	1995
45°	1790	1888	1985
50°	1718	1840	1972
55°	1643	1801	1966
60°	1558	1771	1976
65°	1465	1749	2015
70°	1349	1758	2110
75°	1196	1821	1966
80°	1000	1726	1771
85°	747	1380	1267



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.7	3.4
10°-20°	428.7	9.7
20°-30°	638.9	14.5
30°-40°	752.1	17.1
40°-50°	764.3	17.4
50°-60°	687.1	15.6
60°-70°	542.8	12.3
70°-80°	344.4	7.8
80°-90°	95.0	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°	1218.3	27.7
0°-40°	1970.4	44.7
0°-60°	3421.7	77.7
0°-90°	4404.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4404.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1596	1583	1590	1587	1587	151
15°	1520	1512	1522	1527	1528	428
25°	1374	1373	1389	1398	1404	632
35°	1171	1178	1208	1221	1232	733
45°	941	954	992	1021	1043	726
55°	700	718	768	818	838	626
65°	460	484	550	610	633	456
75°	230	270	350	381	378	245
85°	48	84	89	82	82	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1594.3	1594.3	1594.3	1594.3	1594.3
2.5°	1601.7	1589.9	1595.8	1592.9	1587.0
5°	1595.8	1582.6	1589.9	1587.0	1587.0
7.5°	1582.6	1572.3	1578.2	1576.7	1578.2
10°	1566.5	1556.2	1565.0	1565.0	1563.6
12.5°	1544.5	1535.7	1546.0	1546.0	1547.4
15°	1519.6	1512.3	1522.5	1526.9	1528.4
17.5°	1488.8	1481.5	1494.7	1499.1	1503.5
20°	1453.7	1450.7	1463.9	1468.3	1474.2
22.5°	1414.1	1414.1	1427.3	1433.1	1441.9
25°	1374.5	1373.1	1389.2	1398.0	1403.8
27.5°	1327.6	1329.1	1349.6	1358.4	1365.7
30°	1277.8	1280.7	1304.2	1314.4	1324.7
32.5°	1225.1	1230.9	1257.3	1269.0	1279.3
35°	1170.8	1178.2	1207.5	1220.7	1232.4
37.5°	1116.6	1126.9	1157.6	1170.8	1184.0
40°	1059.5	1068.3	1103.4	1119.5	1135.7
42.5°	1000.9	1012.6	1047.7	1071.2	1090.2
45°	940.8	954.0	992.1	1021.4	1043.3
47.5°	880.7	898.3	934.9	974.5	993.5
50°	820.6	838.2	879.2	923.2	942.2
52.5°	759.1	776.6	823.5	869.0	889.5
55°	700.4	718.0	767.9	817.7	838.2
57.5°	638.9	658.0	713.6	764.9	785.4
60°	578.8	597.9	658.0	712.2	734.2
62.5°	520.2	540.7	603.7	660.9	682.9
65°	460.1	483.6	549.5	609.6	633.0
67.5°	401.5	427.9	496.8	559.8	584.7
70°	342.9	373.7	446.9	511.4	536.3
72.5°	285.7	319.5	397.1	461.6	474.8
75°	230.1	269.6	350.2	381.0	378.1
77.5°	177.3	221.3	297.5	303.3	312.1
80°	129.0	177.3	222.7	234.5	228.6
82.5°	85.0	133.3	159.7	153.9	152.4
85°	48.4	83.5	89.4	82.1	82.1
87.5°	20.5	33.7	29.3	22.0	20.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)