

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: P261065

Luminaire Tested: **24CZ-LD5-45-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261065
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-LD5-45-S-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4272.7 lumens
Efficiency: N/A
Efficacy: 130.4 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

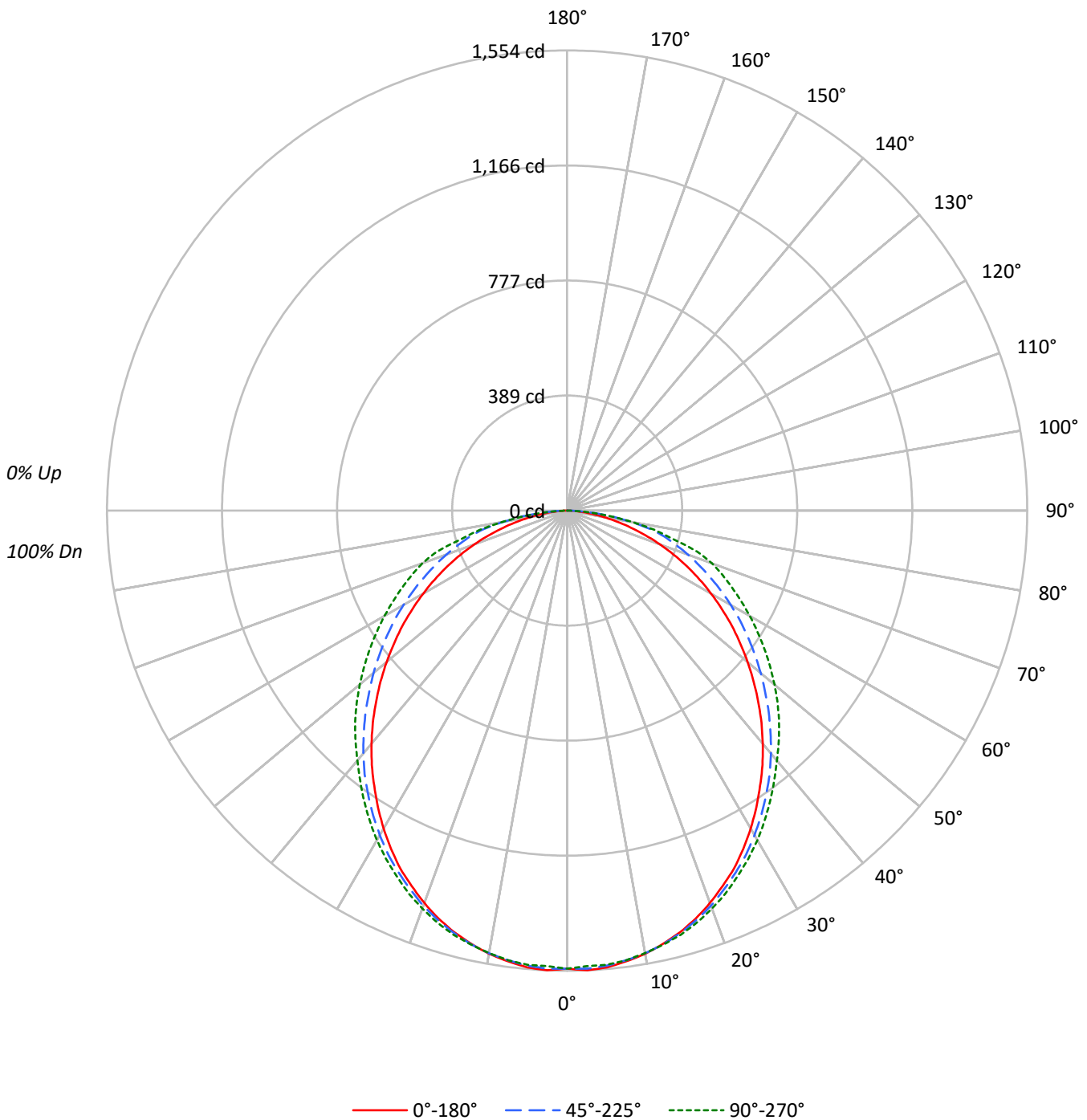
Input Watts (W): 32.754228
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2081	2081	2081
5°	2091	2083	2080
10°	2076	2075	2073
15°	2054	2058	2065
20°	2019	2034	2048
25°	1980	2001	2022
30°	1926	1966	1997
35°	1866	1924	1964
40°	1805	1880	1935
45°	1737	1831	1926
50°	1667	1786	1914
55°	1594	1748	1908
60°	1511	1718	1917
65°	1421	1697	1955
70°	1309	1706	2047
75°	1160	1766	1907
80°	969	1674	1719
85°	724	1338	1229



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.2	3.4
10°-20°	415.9	9.7
20°-30°	619.8	14.5
30°-40°	729.6	17.1
40°-50°	741.5	17.4
50°-60°	666.6	15.6
60°-70°	526.7	12.3
70°-80°	334.1	7.8
80°-90°	92.2	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°	1182.0	27.7
0°-40°	1911.7	44.7
0°-60°	3319.8	77.7
0°-90°	4272.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4272.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1547	1547	1547	1547	1547	
5°	1548	1535	1543	1540	1540	147
15°	1474	1467	1477	1481	1483	415
25°	1334	1332	1348	1356	1362	613
35°	1136	1143	1172	1184	1196	711
45°	913	926	962	991	1012	704
55°	680	697	745	793	813	607
65°	446	469	533	591	614	442
75°	223	262	340	370	367	238
85°	47	81	87	80	80	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1553.9	1542.6	1548.2	1545.4	1539.7
5°	1548.2	1535.4	1542.6	1539.7	1539.7
7.5°	1535.4	1525.5	1531.2	1529.8	1531.2
10°	1519.8	1509.9	1518.4	1518.4	1517.0
12.5°	1498.5	1490.0	1499.9	1499.9	1501.3
15°	1474.3	1467.2	1477.2	1481.4	1482.8
17.5°	1444.5	1437.3	1450.1	1454.4	1458.7
20°	1410.3	1407.5	1420.3	1424.6	1430.2
22.5°	1372.0	1372.0	1384.7	1390.4	1399.0
25°	1333.6	1332.1	1347.8	1356.3	1362.0
27.5°	1288.1	1289.5	1309.4	1317.9	1325.0
30°	1239.7	1242.6	1265.3	1275.3	1285.2
32.5°	1188.6	1194.2	1219.8	1231.2	1241.2
35°	1135.9	1143.1	1171.5	1184.3	1195.7
37.5°	1083.3	1093.3	1123.2	1135.9	1148.7
40°	1027.9	1036.4	1070.5	1086.2	1101.8
42.5°	971.0	982.4	1016.5	1039.3	1057.8
45°	912.7	925.5	962.5	990.9	1012.3
47.5°	854.4	871.5	907.1	945.4	963.9
50°	796.2	813.2	853.0	895.7	914.2
52.5°	736.4	753.5	799.0	843.1	863.0
55°	679.6	696.6	745.0	793.3	813.2
57.5°	619.9	638.3	692.4	742.1	762.0
60°	561.6	580.1	638.3	691.0	712.3
62.5°	504.7	524.6	585.7	641.2	662.5
65°	446.4	469.2	533.1	591.4	614.2
67.5°	389.5	415.1	482.0	543.1	567.3
70°	332.7	362.5	433.6	496.2	520.3
72.5°	277.2	309.9	385.3	447.8	460.6
75°	223.2	261.6	339.8	369.6	366.8
77.5°	172.0	214.7	288.6	294.3	302.8
80°	125.1	172.0	216.1	227.5	221.8
82.5°	82.5	129.4	155.0	149.3	147.9
85°	46.9	81.0	86.7	79.6	79.6
87.5°	19.9	32.7	28.4	21.3	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)