

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: P260989

Luminaire Tested: **24CZ-LD5-45-S-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260989
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-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4803.0 lumens
Efficiency: N/A
Efficacy: 149.4 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

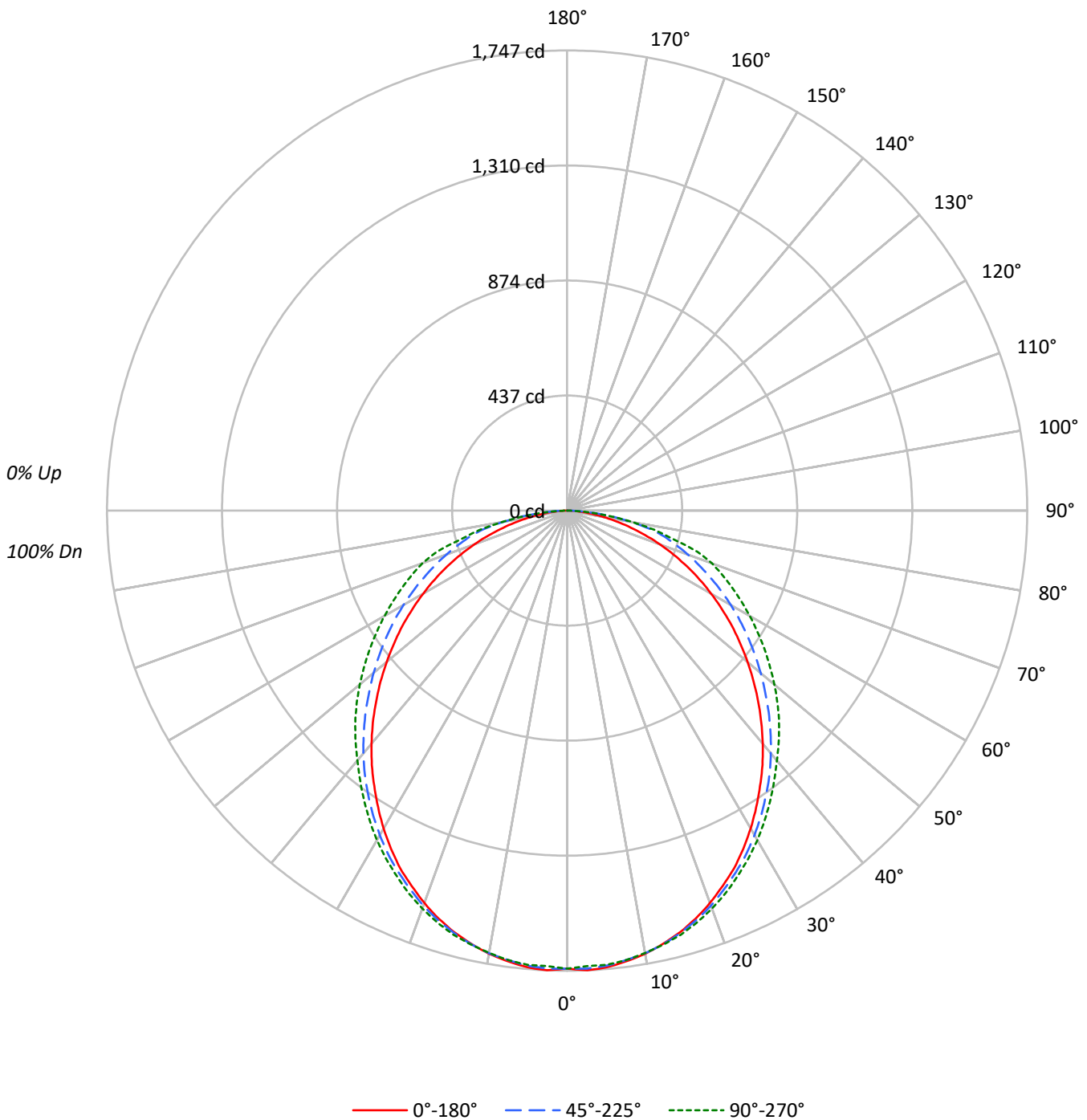
Input Watts (W): 32.156982
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2340	2340	2340
5°	2351	2342	2338
10°	2334	2332	2330
15°	2309	2313	2322
20°	2270	2286	2302
25°	2226	2249	2273
30°	2165	2210	2245
35°	2097	2163	2208
40°	2030	2114	2175
45°	1952	2059	2165
50°	1873	2007	2151
55°	1792	1964	2144
60°	1699	1931	2155
65°	1598	1908	2198
70°	1471	1917	2301
75°	1304	1986	2143
80°	1089	1882	1932
85°	814	1505	1382



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.4	3.4
10°-20°	467.5	9.7
20°-30°	696.8	14.5
30°-40°	820.2	17.1
40°-50°	833.5	17.4
50°-60°	749.4	15.6
60°-70°	592.0	12.3
70°-80°	375.6	7.8
80°-90°	103.7	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°	1328.7	27.7
0°-40°	2148.9	44.7
0°-60°	3731.7	77.7
0°-90°	4803.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1739	1739	1739	1739	1739	
5°	1740	1726	1734	1731	1731	165
15°	1657	1649	1660	1665	1667	467
25°	1499	1498	1515	1525	1531	689
35°	1277	1285	1317	1331	1344	799
45°	1026	1040	1082	1114	1138	792
55°	764	783	837	892	914	682
65°	502	527	599	665	690	497
75°	251	294	382	416	412	267
85°	53	91	98	90	90	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1738.8	1738.8	1738.8	1738.8	1738.8
2.5°	1746.8	1734.0	1740.4	1737.2	1730.8
5°	1740.4	1726.0	1734.0	1730.8	1730.8
7.5°	1726.0	1714.8	1721.2	1719.6	1721.2
10°	1708.4	1697.2	1706.8	1706.8	1705.2
12.5°	1684.4	1674.8	1686.0	1686.0	1687.6
15°	1657.3	1649.3	1660.5	1665.3	1666.9
17.5°	1623.7	1615.7	1630.1	1634.9	1639.7
20°	1585.4	1582.2	1596.5	1601.3	1607.7
22.5°	1542.2	1542.2	1556.6	1563.0	1572.6
25°	1499.1	1497.5	1515.0	1524.6	1531.0
27.5°	1447.9	1449.5	1471.9	1481.5	1489.5
30°	1393.6	1396.8	1422.3	1433.5	1444.7
32.5°	1336.0	1342.4	1371.2	1384.0	1395.2
35°	1276.9	1284.9	1316.9	1331.2	1344.0
37.5°	1217.8	1229.0	1262.5	1276.9	1291.3
40°	1155.5	1165.0	1203.4	1221.0	1238.6
42.5°	1091.5	1104.3	1142.7	1168.2	1189.0
45°	1026.0	1040.4	1081.9	1113.9	1137.9
47.5°	960.5	979.7	1019.6	1062.8	1083.5
50°	895.0	914.1	958.9	1006.8	1027.6
52.5°	827.8	847.0	898.2	947.7	970.1
55°	763.9	783.1	837.4	891.8	914.1
57.5°	696.8	717.6	778.3	834.2	856.6
60°	631.3	652.0	717.6	776.7	800.7
62.5°	567.3	589.7	658.4	720.8	744.7
65°	501.8	527.4	599.3	664.8	690.4
67.5°	437.9	466.7	541.8	610.5	637.7
70°	374.0	407.5	487.4	557.8	584.9
72.5°	311.6	348.4	433.1	503.4	517.8
75°	250.9	294.1	382.0	415.5	412.3
77.5°	193.4	241.3	324.4	330.8	340.4
80°	140.6	193.4	242.9	255.7	249.3
82.5°	92.7	145.4	174.2	167.8	166.2
85°	52.7	91.1	97.5	89.5	89.5
87.5°	22.4	36.8	32.0	24.0	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)