

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: P229976

Luminaire Tested: **24CZ-LD5-55-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229976
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-LD5-55-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4559.0 lumens
Efficiency: N/A
Efficacy: 99.5 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

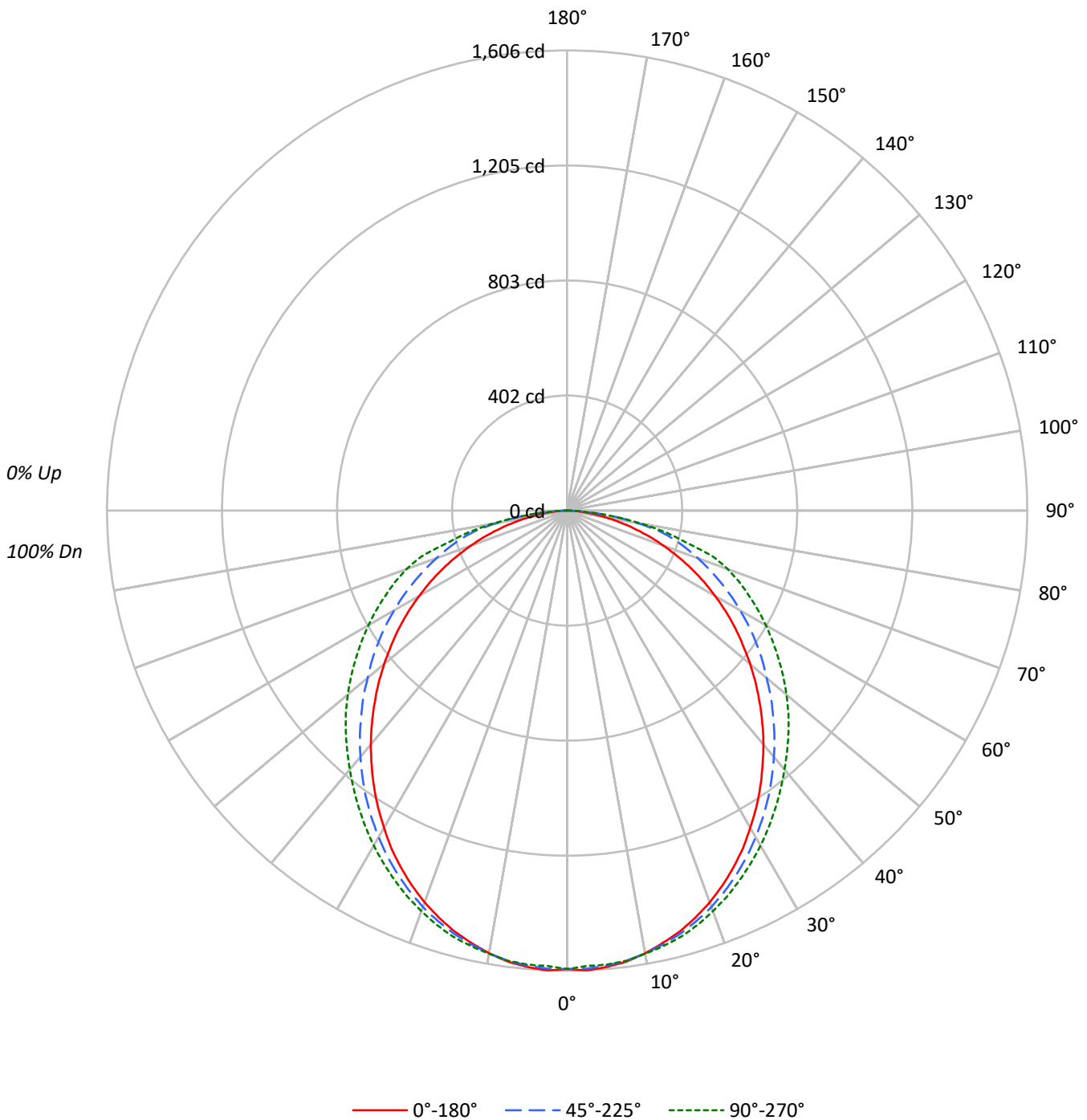
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2153	2153	2153
5°	2159	2152	2148
10°	2143	2143	2145
15°	2118	2129	2144
20°	2083	2108	2130
25°	2039	2079	2113
30°	1986	2044	2098
35°	1931	2010	2082
40°	1873	1971	2073
45°	1809	1934	2079
50°	1745	1902	2091
55°	1681	1889	2113
60°	1605	1877	2155
65°	1521	1878	2226
70°	1406	1910	2346
75°	1258	1996	2232
80°	1052	1911	2044
85°	795	1470	1397



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.3
10°-20°	430.3	9.4
20°-30°	643.3	14.1
30°-40°	763.2	16.7
40°-50°	785.5	17.2
50°-60°	720.6	15.8
60°-70°	582.6	12.8
70°-80°	378.1	8.3
80°-90°	104.3	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°	1224.8	26.9
0°-40°	1988.0	43.6
0°-60°	3494.0	76.6
0°-90°	4559.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4559.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1598	1588	1594	1592	1591	152
15°	1520	1514	1528	1534	1539	428
25°	1374	1375	1400	1413	1424	632
35°	1175	1185	1224	1250	1268	735
45°	951	966	1016	1065	1093	734
55°	716	738	805	871	901	640
65°	478	506	590	668	699	472
75°	242	287	384	429	429	257
85°	52	87	95	92	90	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.0	1600.0	1600.0	1600.0	1600.0
2.5°	1606.2	1593.7	1600.0	1598.4	1590.6
5°	1598.4	1587.5	1593.7	1592.2	1590.6
7.5°	1587.5	1576.6	1584.4	1582.8	1584.4
10°	1568.8	1559.4	1568.8	1570.3	1570.3
12.5°	1545.3	1537.5	1550.0	1553.1	1556.3
15°	1520.4	1514.1	1528.2	1534.4	1539.1
17.5°	1489.1	1484.5	1501.6	1509.4	1515.7
20°	1454.8	1453.2	1472.0	1479.8	1487.6
22.5°	1415.8	1415.8	1437.6	1447.0	1457.9
25°	1373.6	1375.2	1400.2	1412.7	1423.6
27.5°	1328.4	1329.9	1359.6	1375.2	1387.7
30°	1278.4	1284.7	1315.9	1336.2	1350.2
32.5°	1228.5	1236.3	1270.6	1294.0	1309.6
35°	1175.4	1184.8	1223.8	1250.3	1267.5
37.5°	1120.8	1131.7	1173.8	1203.5	1223.8
40°	1066.1	1078.6	1122.3	1156.7	1180.1
42.5°	1008.4	1022.4	1070.8	1111.4	1136.4
45°	950.6	966.2	1016.2	1064.6	1092.7
47.5°	892.9	911.6	964.7	1017.7	1047.4
50°	833.5	852.3	908.5	969.3	999.0
52.5°	774.2	796.1	858.5	921.0	950.6
55°	716.5	738.3	805.4	871.0	900.7
57.5°	657.2	679.0	752.4	821.1	850.7
60°	596.3	621.3	697.7	768.0	800.8
62.5°	537.0	563.5	644.7	719.6	750.8
65°	477.7	505.7	590.0	668.1	699.3
67.5°	416.8	449.6	537.0	616.6	649.4
70°	357.5	393.4	485.5	565.1	596.3
72.5°	299.7	338.7	433.9	515.1	533.8
75°	241.9	287.2	384.0	429.3	429.3
77.5°	187.3	237.3	327.8	345.0	354.3
80°	135.8	190.4	246.6	266.9	263.8
82.5°	90.5	145.2	176.4	176.4	171.7
85°	51.5	87.4	95.2	92.1	90.5
87.5°	21.9	32.8	29.7	23.4	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)