

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: P#

Luminaire Tested: **24CZ-LD5-45SE-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
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-LD5-45SE-S-UNV-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

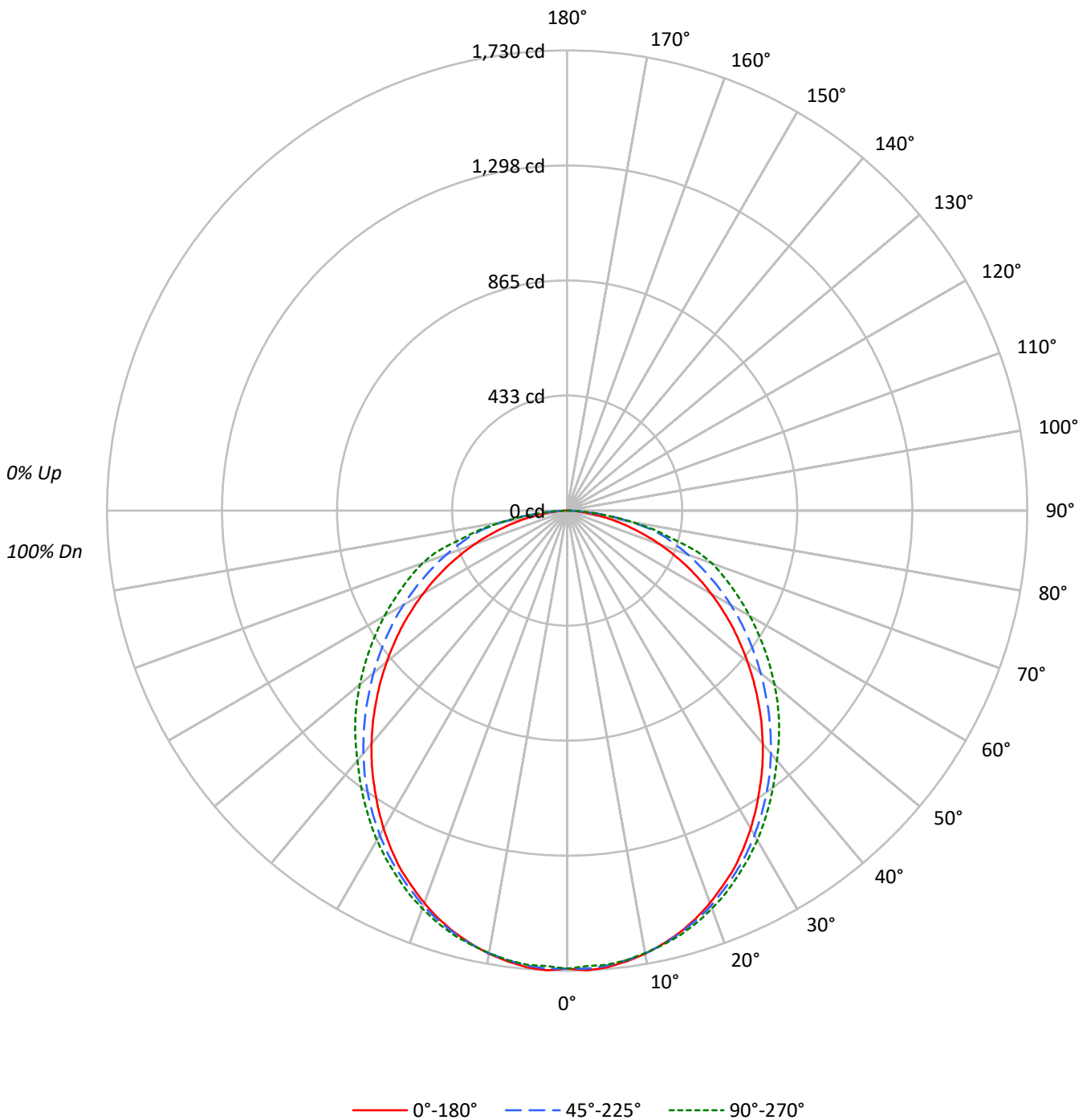
Lumens per Lamp: N/A
Luminaire Lumens: 4756.7 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 39.91
Input Voltage (V): NR
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°	2317	2317	2317
5°	2323	2309	2305
10°	2301	2288	2287
15°	2271	2259	2269
20°	2228	2221	2239
25°	2179	2174	2200
30°	2114	2123	2161
35°	2041	2065	2112
40°	1969	2004	2068
45°	1886	1936	2042
50°	1802	1870	2010
55°	1713	1809	1982
60°	1613	1751	1964
65°	1502	1697	1966
70°	1363	1657	2004
75°	1182	1642	1789
80°	945	1433	1490
85°	627	928	870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.8	3.4
10°-20°	463.0	9.7
20°-30°	690.0	14.5
30°-40°	812.3	17.1
40°-50°	825.5	17.4
50°-60°	742.1	15.6
60°-70°	586.3	12.3
70°-80°	372.0	7.8
80°-90°	102.6	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°	1315.9	27.7
0°-40°	2128.2	44.7
0°-60°	3695.8	77.7
0°-90°	4756.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4756.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1724	1709	1717	1714	1714	163
15°	1641	1633	1644	1649	1651	462
25°	1485	1483	1500	1510	1516	683
35°	1265	1272	1304	1318	1331	791
45°	1016	1030	1072	1103	1127	784
55°	756	776	829	883	905	676
65°	497	522	594	658	684	492
75°	248	291	378	412	408	264
85°	52	90	96	89	89	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.0	1722.0	1722.0	1722.0	1722.0
2.5°	1729.9	1717.3	1723.6	1720.4	1714.1
5°	1723.6	1709.4	1717.3	1714.1	1714.1
7.5°	1709.4	1698.3	1704.6	1703.0	1704.6
10°	1691.9	1680.9	1690.4	1690.4	1688.8
12.5°	1668.2	1658.7	1669.8	1669.8	1671.4
15°	1641.3	1633.4	1644.5	1649.2	1650.8
17.5°	1608.1	1600.1	1614.4	1619.1	1623.9
20°	1570.1	1566.9	1581.2	1585.9	1592.2
22.5°	1527.3	1527.3	1541.6	1547.9	1557.4
25°	1484.6	1483.0	1500.4	1509.9	1516.3
27.5°	1434.0	1435.5	1457.7	1467.2	1475.1
30°	1380.1	1383.3	1408.6	1419.7	1430.8
32.5°	1323.2	1329.5	1358.0	1370.6	1381.7
35°	1264.6	1272.5	1304.2	1318.4	1331.1
37.5°	1206.0	1217.1	1250.4	1264.6	1278.9
40°	1144.3	1153.8	1191.8	1209.2	1226.6
42.5°	1081.0	1093.7	1131.7	1157.0	1177.6
45°	1016.1	1030.4	1071.5	1103.2	1126.9
47.5°	951.2	970.2	1009.8	1052.5	1073.1
50°	886.3	905.3	949.6	997.1	1017.7
52.5°	819.9	838.8	889.5	938.6	960.7
55°	756.5	775.5	829.4	883.2	905.3
57.5°	690.1	710.6	770.8	826.2	848.3
60°	625.2	645.8	710.6	769.2	793.0
62.5°	561.9	584.0	652.1	713.8	737.6
65°	497.0	522.3	593.5	658.4	683.7
67.5°	433.7	462.2	536.5	604.6	631.5
70°	370.4	403.6	482.7	552.4	579.3
72.5°	308.6	345.0	428.9	498.6	512.8
75°	248.5	291.2	378.3	411.5	408.3
77.5°	191.5	239.0	321.3	327.6	337.1
80°	139.3	191.5	240.6	253.2	246.9
82.5°	91.8	144.0	172.5	166.2	164.6
85°	52.2	90.2	96.5	88.6	88.6
87.5°	22.2	36.4	31.7	23.7	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)