

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: P260619

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260619
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-LD5-45SE-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4759.0 lumens
Efficiency: N/A
Efficacy: 133.0 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

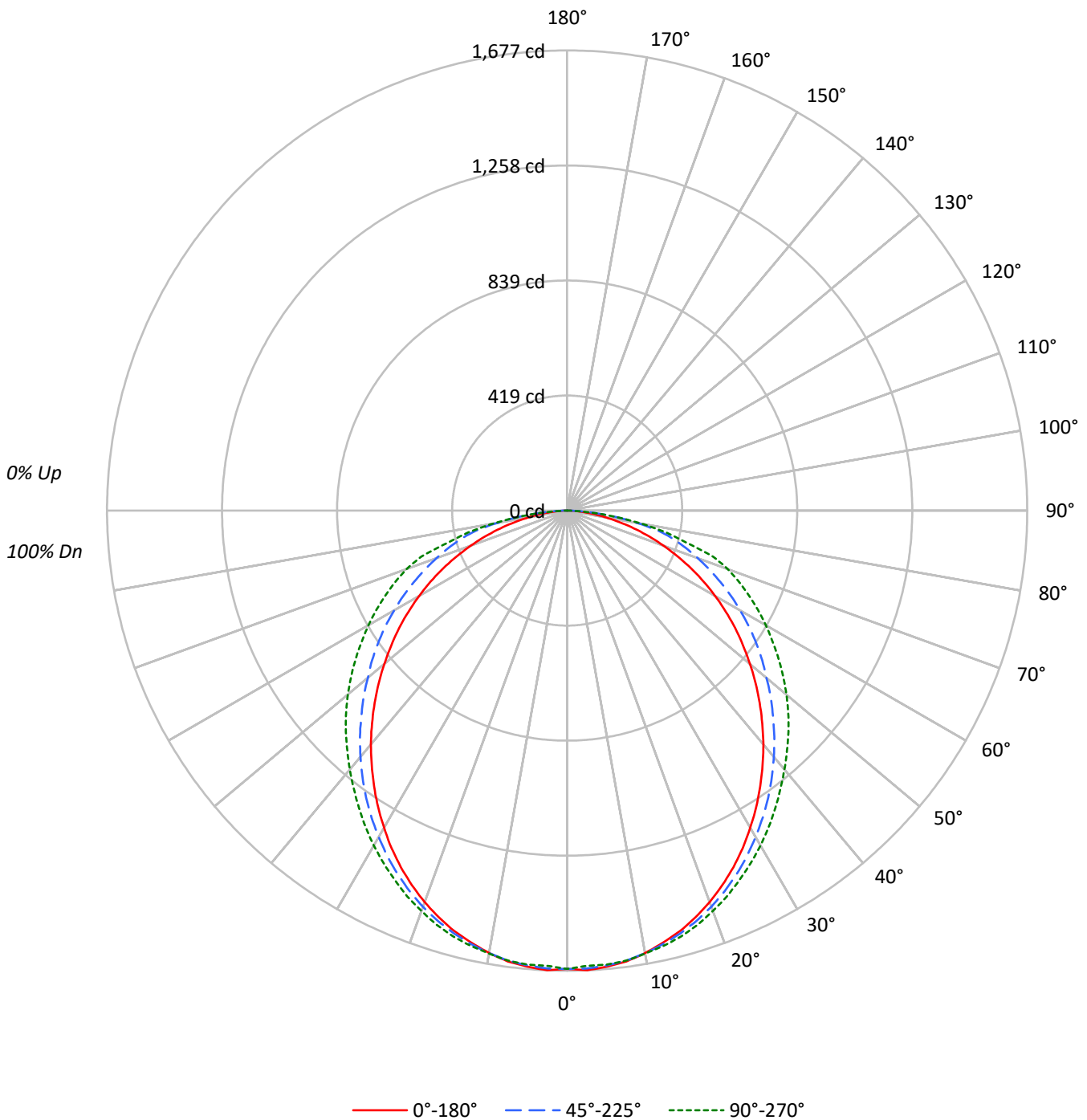
Input Watts (W): 35.772264
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2247	2247	2247
5°	2254	2247	2243
10°	2237	2237	2240
15°	2211	2222	2238
20°	2174	2200	2223
25°	2129	2170	2206
30°	2073	2134	2190
35°	2015	2098	2173
40°	1955	2058	2164
45°	1888	2019	2170
50°	1821	1985	2183
55°	1754	1972	2206
60°	1675	1960	2249
65°	1587	1961	2324
70°	1468	1994	2448
75°	1313	2084	2329
80°	1099	1994	2134
85°	831	1535	1459



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.8	3.3
10°-20°	449.2	9.4
20°-30°	671.5	14.1
30°-40°	796.6	16.7
40°-50°	819.9	17.2
50°-60°	752.2	15.8
60°-70°	608.2	12.8
70°-80°	394.7	8.3
80°-90°	108.8	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°	1278.5	26.9
0°-40°	2075.2	43.6
0°-60°	3647.3	76.6
0°-90°	4759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1670	1670	1670	1670	1670	
5°	1668	1657	1664	1662	1660	158
15°	1587	1580	1595	1602	1607	447
25°	1434	1436	1462	1475	1486	660
35°	1227	1237	1278	1305	1323	767
45°	992	1009	1061	1111	1141	766
55°	748	771	841	909	940	668
65°	499	528	616	697	730	493
75°	253	300	401	448	448	268
85°	54	91	99	96	94	66
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1670.2	1670.2	1670.2	1670.2	1670.2
2.5°	1676.7	1663.6	1670.2	1668.5	1660.4
5°	1668.5	1657.1	1663.6	1662.0	1660.4
7.5°	1657.1	1645.7	1653.9	1652.2	1653.9
10°	1637.6	1627.8	1637.6	1639.2	1639.2
12.5°	1613.1	1605.0	1618.0	1621.3	1624.5
15°	1587.1	1580.5	1595.2	1601.7	1606.6
17.5°	1554.5	1549.6	1567.5	1575.7	1582.2
20°	1518.6	1517.0	1536.5	1544.7	1552.8
22.5°	1477.9	1477.9	1500.7	1510.5	1521.9
25°	1433.9	1435.5	1461.6	1474.6	1486.0
27.5°	1386.6	1388.3	1419.2	1435.5	1448.6
30°	1334.5	1341.0	1373.6	1394.8	1409.5
32.5°	1282.4	1290.5	1326.4	1350.8	1367.1
35°	1227.0	1236.7	1277.5	1305.2	1323.1
37.5°	1169.9	1181.3	1225.3	1256.3	1277.5
40°	1112.9	1125.9	1171.6	1207.4	1231.8
42.5°	1052.6	1067.3	1117.8	1160.2	1186.2
45°	992.3	1008.6	1060.8	1111.3	1140.6
47.5°	932.0	951.6	1007.0	1062.4	1093.3
50°	870.1	889.7	948.3	1011.9	1042.8
52.5°	808.2	831.0	896.2	961.4	992.3
55°	747.9	770.7	840.8	909.2	940.2
57.5°	686.0	708.8	785.4	857.1	888.0
60°	622.4	648.5	728.4	801.7	835.9
62.5°	560.5	588.2	673.0	751.2	783.8
65°	498.6	527.9	615.9	697.4	730.0
67.5°	435.1	469.3	560.5	643.6	677.8
70°	373.1	410.6	506.8	589.9	622.4
72.5°	312.8	353.6	453.0	537.7	557.3
75°	252.6	299.8	400.8	448.1	448.1
77.5°	195.5	247.7	342.2	360.1	369.9
80°	141.8	198.8	257.4	278.6	275.4
82.5°	94.5	151.5	184.1	184.1	179.2
85°	53.8	91.2	99.4	96.1	94.5
87.5°	22.8	34.2	31.0	24.4	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)