

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: P260569

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260569
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-LD5-45-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH RIBBED LENS
Light Source: (336) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4709.0 lumens
Efficiency: N/A
Efficacy: 146.4 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

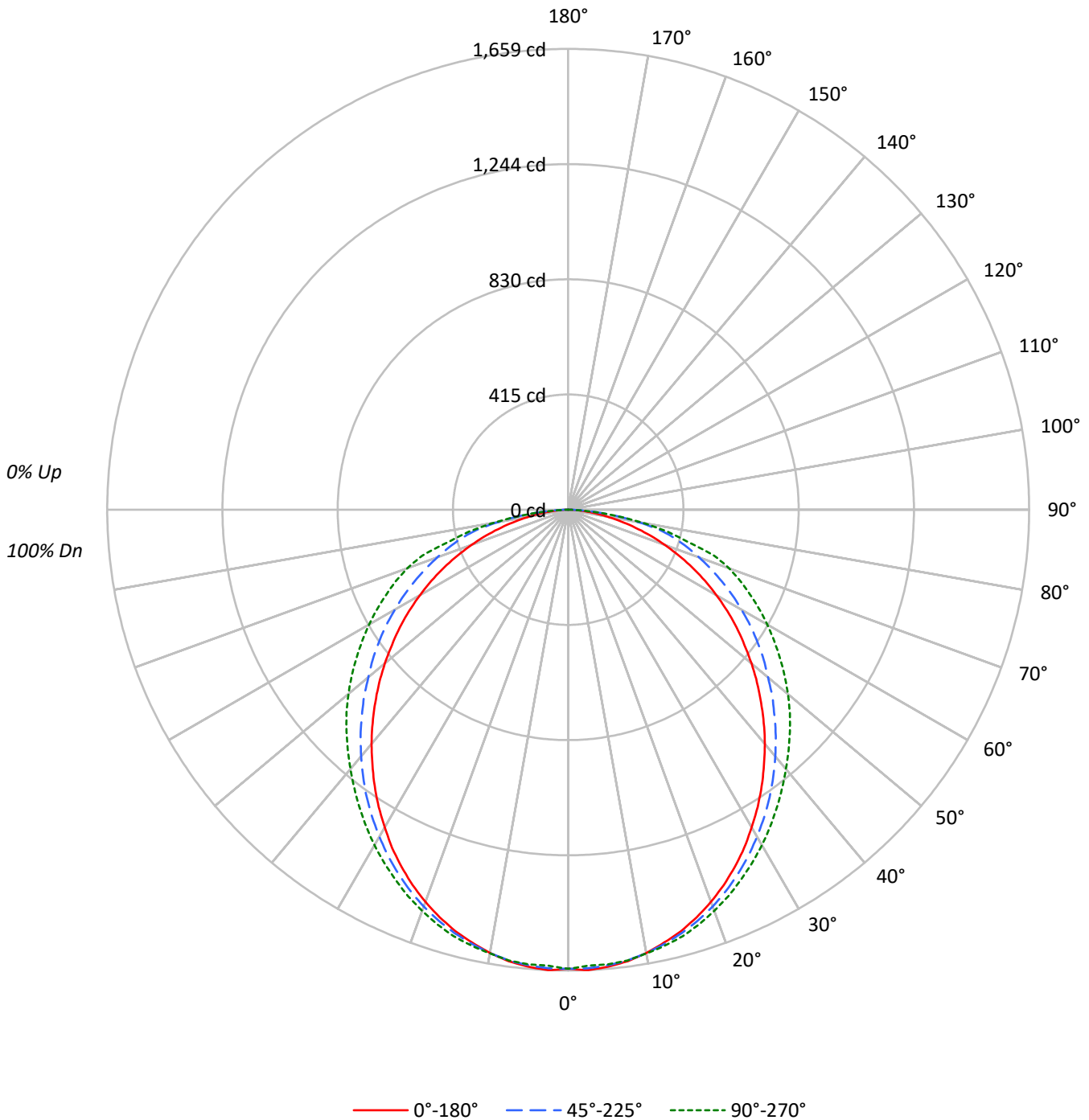
Input Watts (W): 32.156982
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2224	2224	2224
5°	2230	2223	2219
10°	2214	2214	2216
15°	2187	2199	2214
20°	2152	2177	2200
25°	2106	2147	2183
30°	2052	2112	2167
35°	1994	2076	2150
40°	1934	2036	2141
45°	1868	1997	2148
50°	1802	1964	2160
55°	1736	1952	2182
60°	1657	1939	2226
65°	1571	1940	2300
70°	1452	1972	2423
75°	1299	2062	2305
80°	1087	1974	2111
85°	821	1519	1443



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.2	3.3
10°-20°	444.5	9.4
20°-30°	664.5	14.1
30°-40°	788.3	16.7
40°-50°	811.3	17.2
50°-60°	744.3	15.8
60°-70°	601.8	12.8
70°-80°	390.6	8.3
80°-90°	107.7	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°	1265.1	26.9
0°-40°	2053.3	43.6
0°-60°	3609.0	76.6
0°-90°	4709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4709.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1653	1653	1653	1653	1653	
5°	1651	1640	1646	1645	1643	157
15°	1570	1564	1578	1585	1590	442
25°	1419	1420	1446	1459	1470	653
35°	1214	1224	1264	1292	1309	759
45°	982	998	1050	1100	1129	758
55°	740	763	832	900	930	661
65°	493	522	610	690	722	488
75°	250	297	397	443	443	266
85°	53	90	98	95	94	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1652.6	1652.6	1652.6	1652.6	1652.6
2.5°	1659.1	1646.2	1652.6	1651.0	1642.9
5°	1651.0	1639.7	1646.2	1644.6	1642.9
7.5°	1639.7	1628.4	1636.5	1634.9	1636.5
10°	1620.4	1610.7	1620.4	1622.0	1622.0
12.5°	1596.2	1588.1	1601.0	1604.2	1607.5
15°	1570.4	1563.9	1578.4	1584.9	1589.7
17.5°	1538.1	1533.3	1551.0	1559.1	1565.5
20°	1502.7	1501.1	1520.4	1528.5	1536.5
22.5°	1462.4	1462.4	1484.9	1494.6	1505.9
25°	1418.8	1420.4	1446.2	1459.1	1470.4
27.5°	1372.1	1373.7	1404.3	1420.4	1433.3
30°	1320.5	1326.9	1359.2	1380.1	1394.6
32.5°	1268.9	1276.9	1312.4	1336.6	1352.7
35°	1214.1	1223.7	1264.0	1291.5	1309.2
37.5°	1157.6	1168.9	1212.5	1243.1	1264.0
40°	1101.2	1114.1	1159.2	1194.7	1218.9
42.5°	1041.6	1056.1	1106.0	1148.0	1173.8
45°	981.9	998.0	1049.6	1099.6	1128.6
47.5°	922.2	941.6	996.4	1051.2	1081.9
50°	861.0	880.3	938.4	1001.2	1031.9
52.5°	799.7	822.3	886.8	951.3	981.9
55°	740.0	762.6	832.0	899.7	930.3
57.5°	678.8	701.4	777.1	848.1	878.7
60°	615.9	641.7	720.7	793.3	827.1
62.5°	554.6	582.0	665.9	743.3	775.5
65°	493.4	522.4	609.5	690.1	722.3
67.5°	430.5	464.3	554.6	636.9	670.7
70°	369.2	406.3	501.4	583.7	615.9
72.5°	309.6	349.9	448.2	532.1	551.4
75°	249.9	296.7	396.6	443.4	443.4
77.5°	193.5	245.1	338.6	356.3	366.0
80°	140.3	196.7	254.7	275.7	272.5
82.5°	93.5	149.9	182.2	182.2	177.4
85°	53.2	90.3	98.4	95.1	93.5
87.5°	22.6	33.9	30.6	24.2	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)