

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: P258812

Luminaire Tested: **14CZ-LD5-44-S-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258812
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-44-S-UNV-L82765-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4440.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

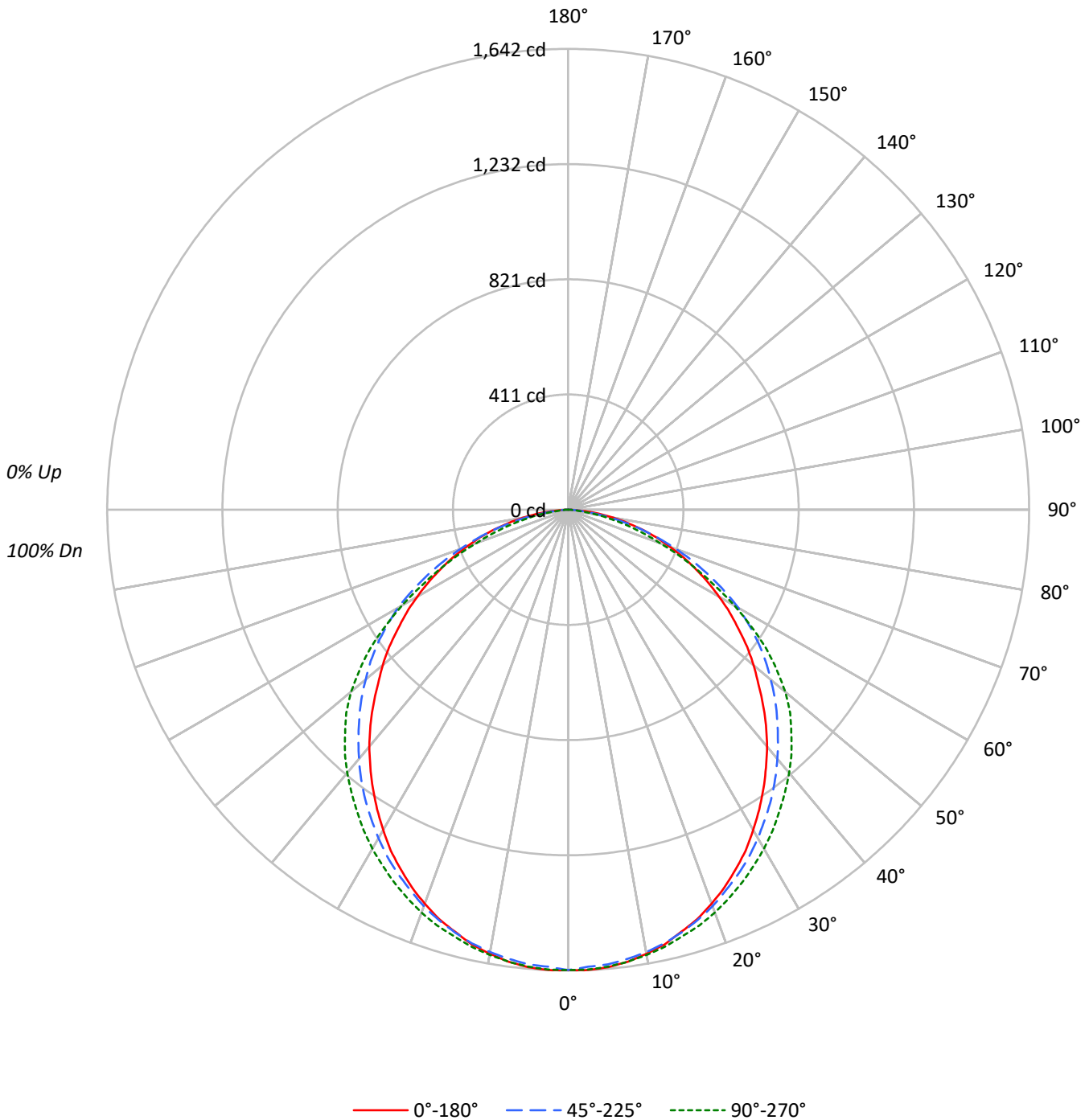
Input Watts (W): 35.991
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4413	4413	4413
5°	4420	4393	4414
10°	4390	4374	4401
15°	4338	4343	4382
20°	4277	4306	4374
25°	4194	4253	4353
30°	4094	4199	4334
35°	3984	4140	4309
40°	3871	4073	4302
45°	3734	4005	4277
50°	3611	3942	4224
55°	3471	3880	4038
60°	3343	3770	3684
65°	3200	3528	3238
70°	3020	3207	2740
75°	2818	2777	2262
80°	2484	2146	1655
85°	1954	1037	917



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.0	3.5
10°-20°	441.5	9.9
20°-30°	662.6	14.9
30°-40°	789.9	17.8
40°-50°	813.6	18.3
50°-60°	725.1	16.3
60°-70°	522.5	11.8
70°-80°	273.3	6.2
80°-90°	56.5	1.3
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°	1259.1	28.4
0°-40°	2049.0	46.1
0°-60°	3587.7	80.8
0°-90°	4440.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4440.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1636	1632	1626	1636	1634	155
15°	1557	1559	1559	1575	1573	439
25°	1413	1420	1432	1460	1466	651
35°	1213	1229	1260	1302	1312	758
45°	981	1003	1052	1112	1124	757
55°	740	764	827	865	861	664
65°	502	520	554	528	508	498
75°	271	285	267	232	218	287
85°	63	55	34	30	30	75
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1640.1	1640.1	1640.1	1640.1	1640.1
2.5°	1642.1	1638.2	1630.2	1640.1	1640.1
5°	1636.2	1632.2	1626.3	1636.2	1634.2
7.5°	1624.3	1620.4	1614.4	1626.3	1624.3
10°	1606.5	1604.5	1600.6	1612.4	1610.5
12.5°	1586.7	1584.7	1582.8	1594.6	1594.6
15°	1557.0	1559.0	1559.0	1574.8	1572.9
17.5°	1529.3	1531.3	1533.3	1553.1	1553.1
20°	1493.7	1495.7	1503.6	1525.4	1527.4
22.5°	1456.1	1458.1	1468.0	1493.7	1497.7
25°	1412.6	1420.5	1432.4	1460.1	1466.0
27.5°	1369.1	1375.0	1394.8	1426.5	1430.4
30°	1317.6	1329.5	1351.3	1386.9	1394.8
32.5°	1266.2	1280.1	1305.8	1345.3	1355.2
35°	1212.8	1228.6	1260.3	1301.8	1311.7
37.5°	1157.4	1171.2	1210.8	1254.3	1268.2
40°	1102.0	1115.8	1159.4	1208.8	1224.7
42.5°	1042.6	1062.4	1106.0	1161.4	1177.2
45°	981.3	1003.1	1052.5	1111.9	1123.8
47.5°	918.0	941.7	999.1	1058.5	1072.3
50°	862.6	884.4	941.7	999.1	1009.0
52.5°	803.3	823.0	886.3	933.8	935.8
55°	739.9	763.7	827.0	864.6	860.6
57.5°	682.6	702.4	763.7	783.5	771.6
60°	621.2	639.0	700.4	702.4	684.5
62.5°	561.9	579.7	627.2	613.3	591.6
65°	502.5	520.3	554.0	528.2	508.5
67.5°	445.2	461.0	480.8	447.1	427.3
70°	383.8	405.6	407.6	368.0	348.2
72.5°	330.4	342.3	338.3	300.7	282.9
75°	271.0	284.9	267.1	231.5	217.6
77.5°	215.7	225.5	201.8	168.2	158.3
80°	160.3	166.2	138.5	112.8	106.8
82.5°	108.8	108.8	79.1	61.3	55.4
85°	63.3	55.4	33.6	29.7	29.7
87.5°	21.8	13.8	13.8	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)