

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: P261229

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261229  
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-LD5-35SE-S-UNV-L82765-W2A1-U-6500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3792.0 lumens  
Efficiency: N/A  
Efficacy: 139.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

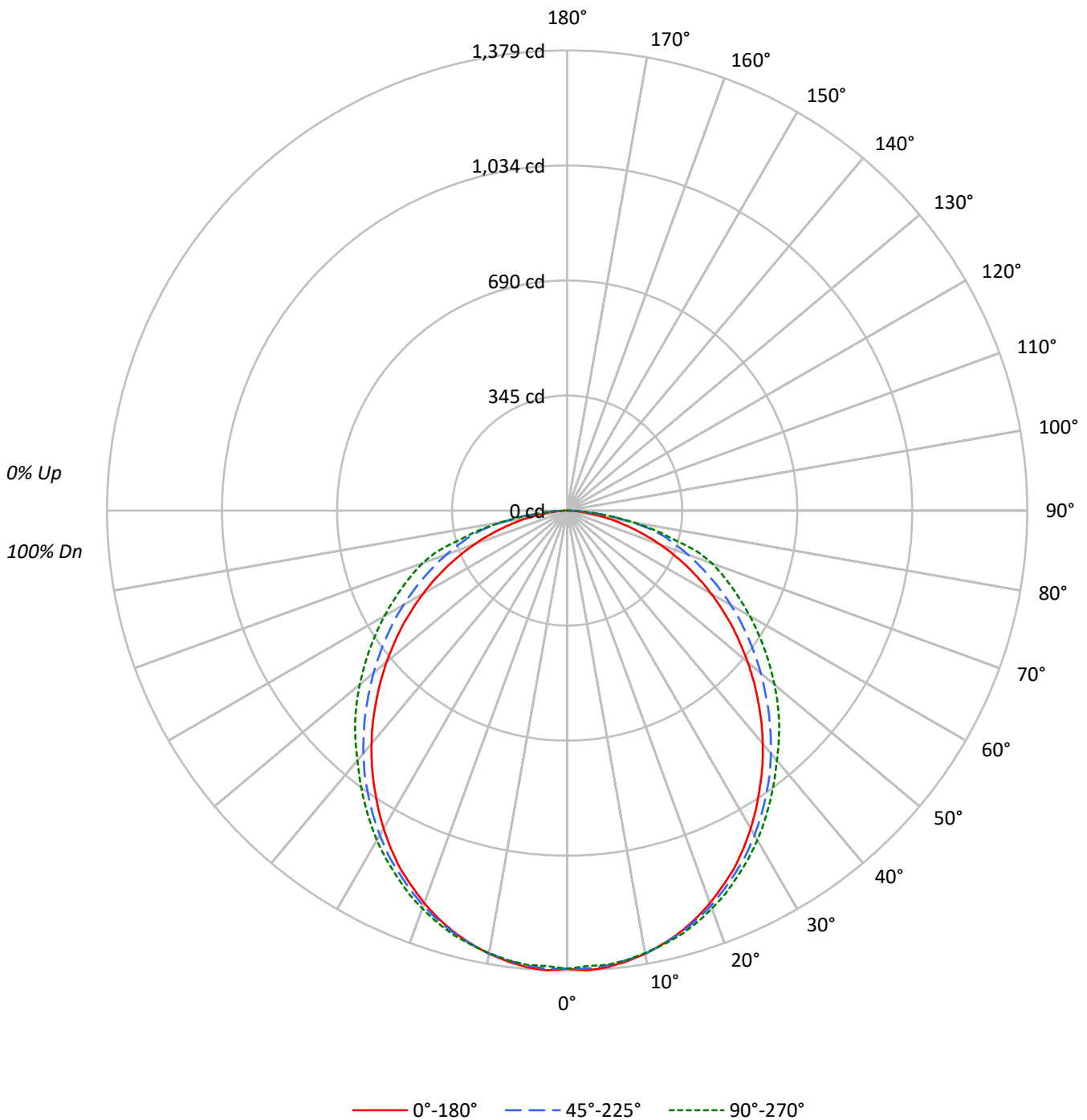
Input Watts (W): 27.156  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1847	1847	1847
5°	1856	1849	1846
10°	1843	1841	1839
15°	1823	1826	1833
20°	1792	1805	1817
25°	1757	1776	1794
30°	1709	1745	1772
35°	1656	1708	1743
40°	1602	1669	1717
45°	1541	1625	1709
50°	1479	1585	1698
55°	1415	1551	1693
60°	1341	1524	1701
65°	1261	1507	1735
70°	1161	1514	1817
75°	1030	1568	1692
80°	860	1486	1525
85°	642	1189	1091



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.8	3.4
10°-20°	369.1	9.7
20°-30°	550.1	14.5
30°-40°	647.5	17.1
40°-50°	658.0	17.4
50°-60°	591.6	15.6
60°-70°	467.4	12.3
70°-80°	296.5	7.8
80°-90°	81.8	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°	1049.0	27.7
0°-40°	1696.6	44.7
0°-60°	2946.2	77.7
0°-90°	3792.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3792.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1374	1363	1369	1366	1366	130
15°	1308	1302	1311	1315	1316	369
25°	1184	1182	1196	1204	1209	544
35°	1008	1014	1040	1051	1061	631
45°	810	821	854	879	898	625
55°	603	618	661	704	722	539
65°	396	416	473	525	545	392
75°	198	232	302	328	326	211
85°	42	72	77	71	71	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1372.8	1372.8	1372.8	1372.8	1372.8
2.5°	1379.1	1369.0	1374.0	1371.5	1366.5
5°	1374.0	1362.7	1369.0	1366.5	1366.5
7.5°	1362.7	1353.8	1358.9	1357.6	1358.9
10°	1348.8	1340.0	1347.5	1347.5	1346.3
12.5°	1329.9	1322.3	1331.1	1331.1	1332.4
15°	1308.4	1302.1	1310.9	1314.7	1316.0
17.5°	1281.9	1275.6	1287.0	1290.8	1294.5
20°	1251.6	1249.1	1260.5	1264.3	1269.3
22.5°	1217.6	1217.6	1228.9	1234.0	1241.6
25°	1183.5	1182.3	1196.1	1203.7	1208.7
27.5°	1143.1	1144.4	1162.1	1169.6	1175.9
30°	1100.2	1102.8	1122.9	1131.8	1140.6
32.5°	1054.8	1059.9	1082.6	1092.7	1101.5
35°	1008.1	1014.4	1039.7	1051.0	1061.1
37.5°	961.4	970.3	996.8	1008.1	1019.5
40°	912.2	919.8	950.1	964.0	977.8
42.5°	861.8	871.9	902.1	922.3	938.7
45°	810.0	821.4	854.2	879.4	898.4
47.5°	758.3	773.4	805.0	839.1	855.5
50°	706.6	721.7	757.0	794.9	811.3
52.5°	653.6	668.7	709.1	748.2	765.9
55°	603.1	618.3	661.2	704.1	721.7
57.5°	550.1	566.5	614.5	658.6	676.3
60°	498.4	514.8	566.5	613.2	632.1
62.5°	447.9	465.6	519.8	569.0	588.0
65°	396.2	416.4	473.2	524.9	545.1
67.5°	345.7	368.4	427.7	482.0	503.4
70°	295.2	321.7	384.8	440.3	461.8
72.5°	246.0	275.1	341.9	397.4	408.8
75°	198.1	232.2	301.6	328.1	325.5
77.5°	152.7	190.5	256.1	261.2	268.8
80°	111.0	152.7	191.8	201.9	196.8
82.5°	73.2	114.8	137.5	132.5	131.2
85°	41.6	71.9	77.0	70.7	70.7
87.5°	17.7	29.0	25.2	18.9	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)