

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: P260609

Luminaire Tested: **24CZ-LD5-35SE-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260609  
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-LD5-35SE-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: 3735.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 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

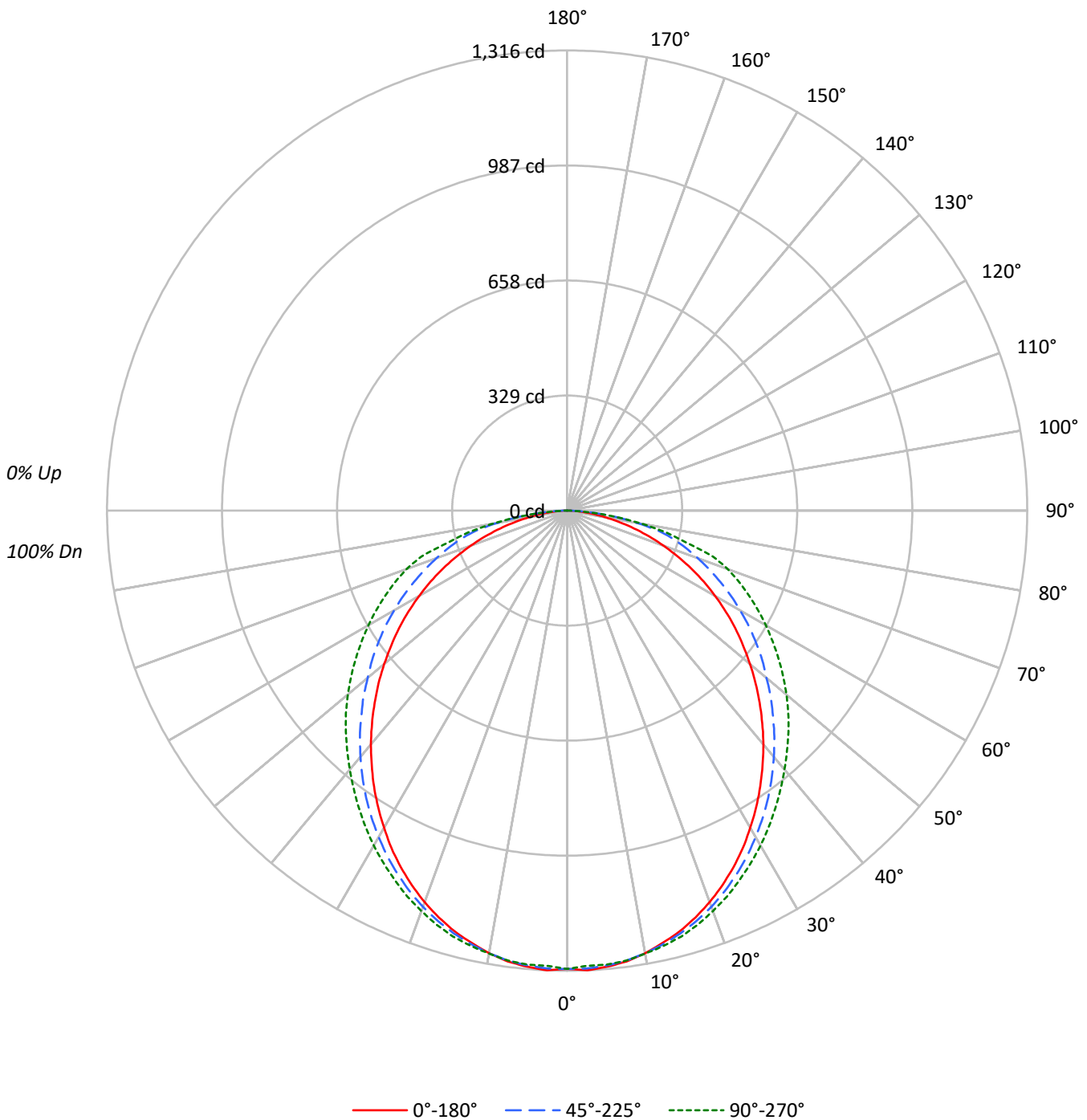
Input Watts (W): 26.63892  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1764	1764	1764
5°	1769	1764	1760
10°	1756	1756	1758
15°	1735	1744	1756
20°	1707	1727	1745
25°	1671	1703	1731
30°	1627	1675	1719
35°	1582	1647	1706
40°	1534	1615	1698
45°	1482	1584	1703
50°	1429	1558	1713
55°	1377	1548	1731
60°	1315	1538	1765
65°	1246	1539	1824
70°	1152	1565	1922
75°	1030	1635	1828
80°	862	1566	1674
85°	651	1204	1145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	3.3
10°-20°	352.5	9.4
20°-30°	527.0	14.1
30°-40°	625.2	16.7
40°-50°	643.5	17.2
50°-60°	590.3	15.8
60°-70°	477.3	12.8
70°-80°	309.8	8.3
80°-90°	85.4	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°	1003.4	26.9
0°-40°	1628.6	43.6
0°-60°	2862.5	76.6
0°-90°	3735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3735.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1311	1311	1311	1311	1311	
5°	1310	1301	1306	1304	1303	124
15°	1246	1240	1252	1257	1261	351
25°	1125	1127	1147	1157	1166	518
35°	963	971	1003	1024	1038	602
45°	779	792	832	872	895	601
55°	587	605	660	714	738	524
65°	391	414	483	547	573	387
75°	198	235	315	352	352	211
85°	42	72	78	76	74	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1310.8	1310.8	1310.8	1310.8	1310.8
2.5°	1315.9	1305.7	1310.8	1309.5	1303.1
5°	1309.5	1300.6	1305.7	1304.4	1303.1
7.5°	1300.6	1291.6	1298.0	1296.7	1298.0
10°	1285.2	1277.5	1285.2	1286.5	1286.5
12.5°	1266.0	1259.6	1269.9	1272.4	1275.0
15°	1245.6	1240.5	1252.0	1257.1	1260.9
17.5°	1220.0	1216.2	1230.2	1236.6	1241.7
20°	1191.9	1190.6	1205.9	1212.3	1218.7
22.5°	1159.9	1159.9	1177.8	1185.5	1194.4
25°	1125.4	1126.6	1147.1	1157.3	1166.3
27.5°	1088.3	1089.6	1113.9	1126.6	1136.9
30°	1047.4	1052.5	1078.0	1094.7	1106.2
32.5°	1006.4	1012.8	1041.0	1060.1	1072.9
35°	963.0	970.6	1002.6	1024.3	1038.4
37.5°	918.2	927.1	961.7	986.0	1002.6
40°	873.4	883.7	919.5	947.6	966.8
42.5°	826.1	837.6	877.3	910.5	931.0
45°	778.8	791.6	832.5	872.2	895.2
47.5°	731.5	746.8	790.3	833.8	858.1
50°	682.9	698.2	744.3	794.1	818.4
52.5°	634.3	652.2	703.4	754.5	778.8
55°	587.0	604.9	659.9	713.6	737.9
57.5°	538.4	556.3	616.4	672.7	697.0
60°	488.5	509.0	571.6	629.2	656.0
62.5°	439.9	461.7	528.2	589.5	615.1
65°	391.3	414.3	483.4	547.3	572.9
67.5°	341.4	368.3	439.9	505.1	532.0
70°	292.8	322.3	397.7	462.9	488.5
72.5°	245.5	277.5	355.5	422.0	437.4
75°	198.2	235.3	314.6	351.7	351.7
77.5°	153.5	194.4	268.6	282.6	290.3
80°	111.3	156.0	202.1	218.7	216.1
82.5°	74.2	118.9	144.5	144.5	140.7
85°	42.2	71.6	78.0	75.5	74.2
87.5°	17.9	26.9	24.3	19.2	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)