

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: P261359

Luminaire Tested: **24CZ-LD5-35SE-S-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261359  
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-L92765-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3205.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 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

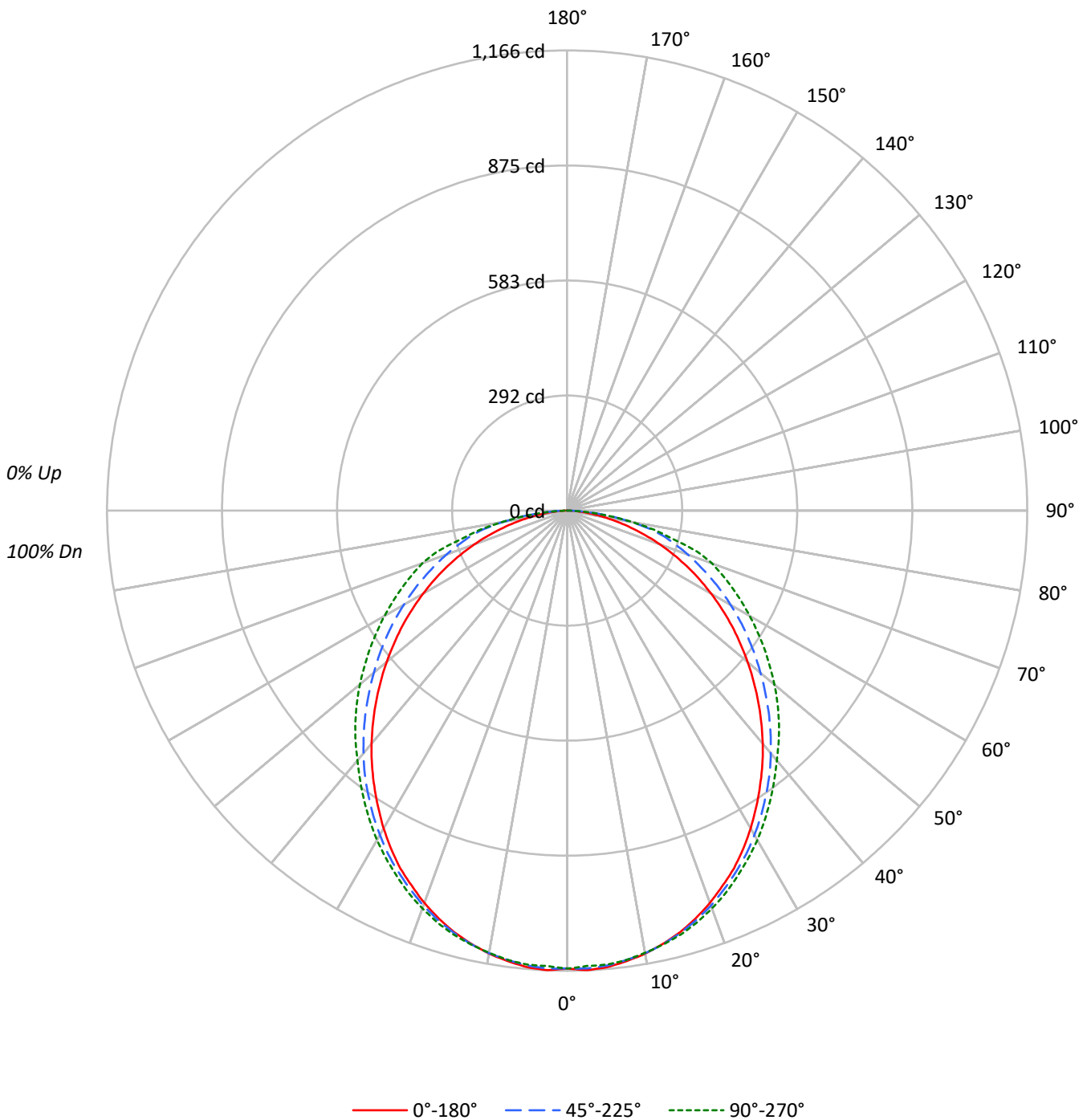
Input Watts (W): 26.319  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1561	1561	1561
5°	1568	1563	1560
10°	1558	1556	1555
15°	1540	1543	1549
20°	1515	1525	1536
25°	1485	1501	1517
30°	1445	1475	1498
35°	1400	1443	1473
40°	1354	1410	1452
45°	1303	1374	1445
50°	1250	1339	1435
55°	1196	1311	1431
60°	1133	1288	1438
65°	1066	1273	1467
70°	982	1280	1535
75°	870	1325	1430
80°	727	1256	1289
85°	543	1005	922



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.7	3.4
10°-20°	312.0	9.7
20°-30°	464.9	14.5
30°-40°	547.3	17.1
40°-50°	556.2	17.4
50°-60°	500.0	15.6
60°-70°	395.1	12.3
70°-80°	250.6	7.8
80°-90°	69.2	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°	886.6	27.7
0°-40°	1433.9	44.7
0°-60°	2490.2	77.7
0°-90°	3205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3205.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1160	1160	1160	1160	1160	
5°	1161	1152	1157	1155	1155	110
15°	1106	1100	1108	1111	1112	312
25°	1000	999	1011	1017	1022	460
35°	852	857	879	888	897	533
45°	685	694	722	743	759	528
55°	510	522	559	595	610	455
65°	335	352	400	444	461	332
75°	167	196	255	277	275	178
85°	35	61	65	60	60	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1160.3	1160.3	1160.3	1160.3	1160.3
2.5°	1165.6	1157.1	1161.3	1159.2	1154.9
5°	1161.3	1151.7	1157.1	1154.9	1154.9
7.5°	1151.7	1144.3	1148.5	1147.5	1148.5
10°	1140.0	1132.5	1138.9	1138.9	1137.9
12.5°	1124.0	1117.6	1125.1	1125.1	1126.1
15°	1105.9	1100.5	1108.0	1111.2	1112.3
17.5°	1083.5	1078.2	1087.8	1091.0	1094.2
20°	1057.9	1055.8	1065.4	1068.6	1072.8
22.5°	1029.1	1029.1	1038.7	1043.0	1049.4
25°	1000.3	999.2	1011.0	1017.4	1021.6
27.5°	966.2	967.2	982.2	988.6	993.9
30°	929.9	932.1	949.1	956.6	964.0
32.5°	891.5	895.8	915.0	923.5	931.0
35°	852.1	857.4	878.7	888.3	896.9
37.5°	812.6	820.1	842.5	852.1	861.7
40°	771.0	777.4	803.0	814.7	826.5
42.5°	728.4	736.9	762.5	779.6	793.4
45°	684.6	694.2	722.0	743.3	759.3
47.5°	640.9	653.7	680.4	709.2	723.0
50°	597.2	610.0	639.9	671.8	685.7
52.5°	552.4	565.2	599.3	632.4	647.3
55°	509.8	522.5	558.8	595.1	610.0
57.5°	465.0	478.8	519.3	556.7	571.6
60°	421.2	435.1	478.8	518.3	534.3
62.5°	378.6	393.5	439.4	481.0	497.0
65°	334.9	351.9	399.9	443.6	460.7
67.5°	292.2	311.4	361.5	407.4	425.5
70°	249.5	271.9	325.3	372.2	390.3
72.5°	208.0	232.5	289.0	335.9	345.5
75°	167.4	196.2	254.9	277.3	275.1
77.5°	129.0	161.0	216.5	220.7	227.1
80°	93.8	129.0	162.1	170.6	166.4
82.5°	61.9	97.0	116.2	112.0	110.9
85°	35.2	60.8	65.1	59.7	59.7
87.5°	14.9	24.5	21.3	16.0	14.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)