

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: P260682

Luminaire Tested: **24CZ-LD5-35SE-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260682  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2767.3 lumens  
Efficiency: N/A  
Efficacy: 103.9 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

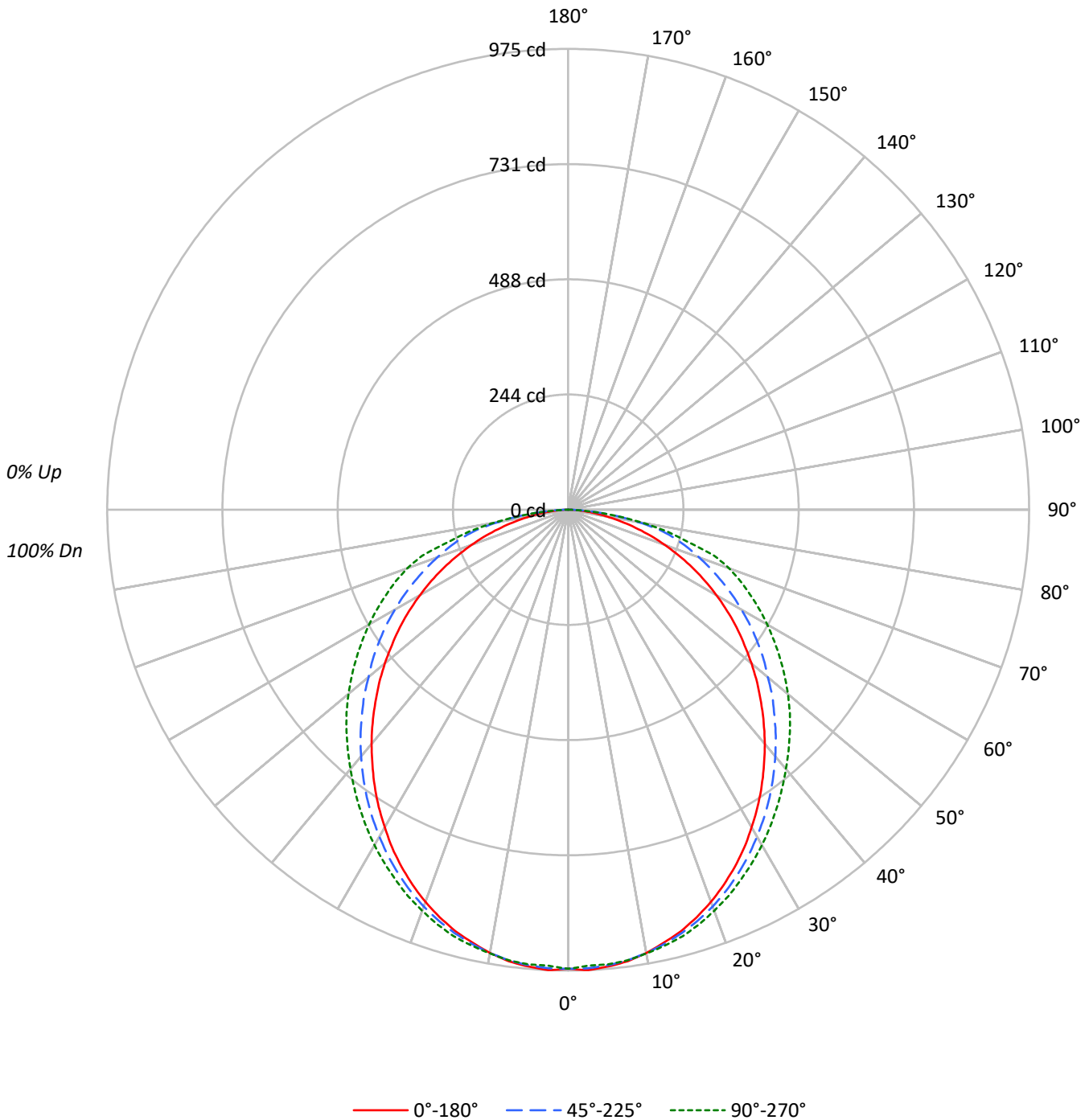
Input Watts (W): 26.63892  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1307	1307	1307
5°	1310	1307	1304
10°	1301	1301	1302
15°	1286	1292	1301
20°	1264	1279	1293
25°	1238	1262	1283
30°	1206	1241	1273
35°	1172	1220	1264
40°	1137	1197	1258
45°	1098	1174	1262
50°	1059	1154	1269
55°	1020	1147	1282
60°	974	1140	1308
65°	923	1140	1351
70°	854	1159	1424
75°	764	1212	1355
80°	638	1160	1241
85°	483	892	849



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.8	3.3
10°-20°	261.2	9.4
20°-30°	390.5	14.1
30°-40°	463.2	16.7
40°-50°	476.8	17.2
50°-60°	437.4	15.8
60°-70°	353.7	12.8
70°-80°	229.5	8.3
80°-90°	63.3	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°	743.5	26.9
0°-40°	1206.7	43.6
0°-60°	2120.9	76.6
0°-90°	2767.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2767.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	964	967	966	966	92
15°	923	919	928	931	934	260
25°	834	835	850	858	864	384
35°	714	719	743	759	769	446
45°	577	586	617	646	663	445
55°	435	448	489	529	547	389
65°	290	307	358	406	424	287
75°	147	174	233	261	261	156
85°	31	53	58	56	55	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	971.2	971.2	971.2	971.2	971.2
2.5°	975.0	967.4	971.2	970.2	965.5
5°	970.2	963.6	967.4	966.5	965.5
7.5°	963.6	957.0	961.7	960.8	961.7
10°	952.2	946.6	952.2	953.2	953.2
12.5°	938.0	933.3	940.9	942.8	944.7
15°	922.9	919.1	927.6	931.4	934.2
17.5°	903.9	901.1	911.5	916.2	920.0
20°	883.1	882.1	893.5	898.2	903.0
22.5°	859.4	859.4	872.7	878.3	885.0
25°	833.8	834.8	849.9	857.5	864.1
27.5°	806.3	807.3	825.3	834.8	842.3
30°	776.0	779.8	798.7	811.1	819.6
32.5°	745.7	750.4	771.3	785.5	795.0
35°	713.5	719.2	742.8	759.0	769.4
37.5°	680.3	686.9	712.5	730.5	742.8
40°	647.1	654.7	681.3	702.1	716.3
42.5°	612.1	620.6	650.0	674.6	689.8
45°	577.0	586.5	616.8	646.2	663.3
47.5°	542.0	553.3	585.6	617.8	635.8
50°	506.0	517.3	551.4	588.4	606.4
52.5°	470.0	483.2	521.1	559.0	577.0
55°	434.9	448.2	488.9	528.7	546.7
57.5°	398.9	412.2	456.7	498.4	516.4
60°	361.9	377.1	423.5	466.2	486.1
62.5°	325.9	342.0	391.3	436.8	455.8
65°	289.9	307.0	358.2	405.5	424.5
67.5°	253.0	272.9	325.9	374.3	394.2
70°	217.0	238.8	294.7	343.0	361.9
72.5°	181.9	205.6	263.4	312.7	324.0
75°	146.9	174.3	233.1	260.6	260.6
77.5°	113.7	144.0	199.0	209.4	215.1
80°	82.4	115.6	149.7	162.0	160.1
82.5°	55.0	88.1	107.1	107.1	104.2
85°	31.3	53.1	57.8	55.9	55.0
87.5°	13.3	19.9	18.0	14.2	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)