

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: P263205

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263205  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-35SE-SQP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2199.3 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

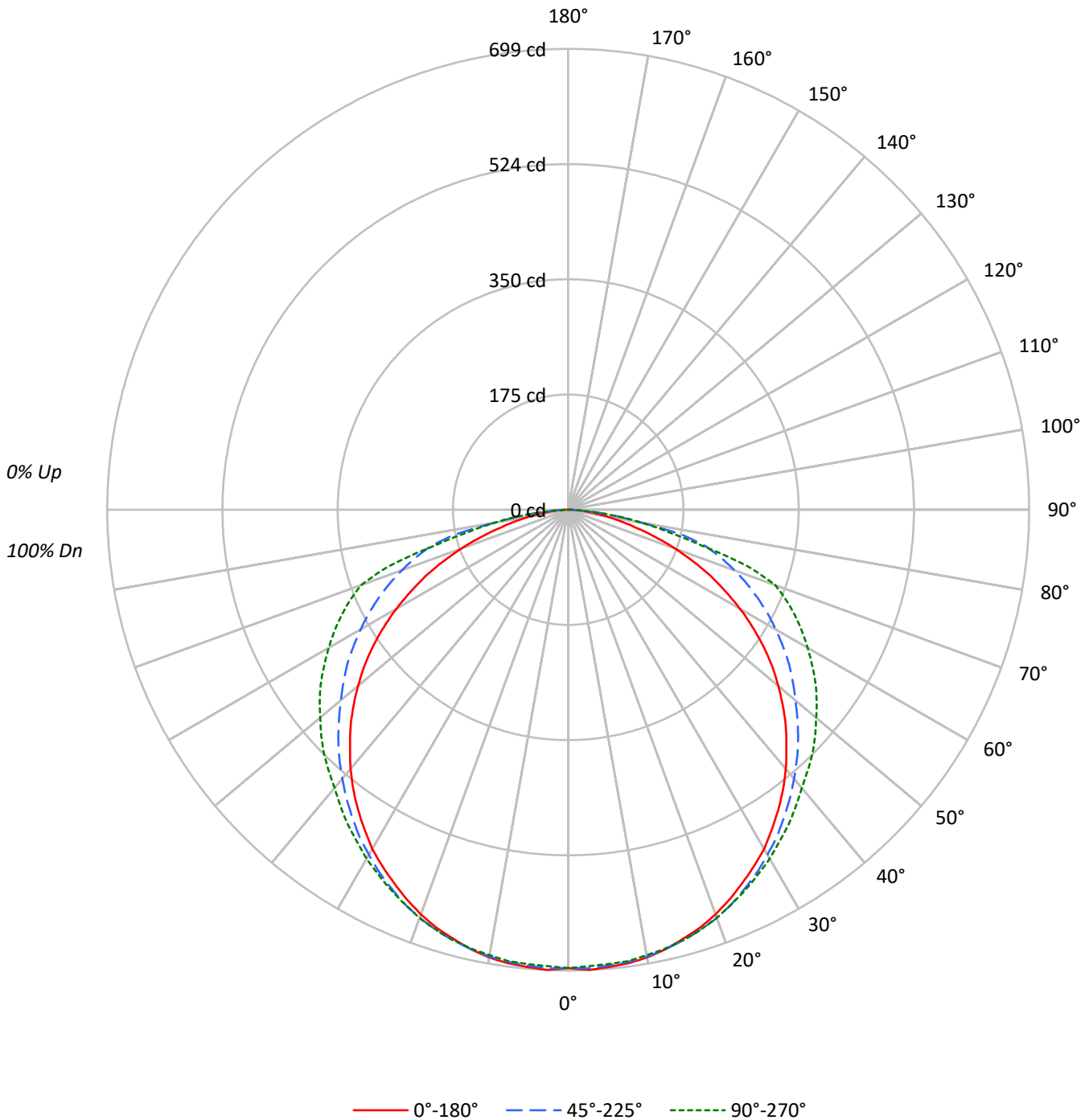
Input Watts (W): 27.13368  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	935	935	935
5°	941	937	934
10°	942	941	938
15°	938	941	941
20°	935	943	943
25°	928	941	944
30°	923	939	950
35°	912	937	957
40°	902	936	968
45°	888	938	997
50°	870	942	1027
55°	848	959	1074
60°	810	978	1128
65°	760	1009	1208
70°	679	1055	1314
75°	561	1128	1087
80°	458	872	880
85°	369	579	543



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.0	3.0
10°-20°	190.5	8.7
20°-30°	291.2	13.2
30°-40°	356.2	16.2
40°-50°	381.1	17.3
50°-60°	364.9	16.6
60°-70°	308.7	14.0
70°-80°	195.7	8.9
80°-90°	45.0	2.0
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°	547.8	24.9
0°-40°	903.9	41.1
0°-60°	1649.9	75.0
0°-90°	2199.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2199.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	693	694	693	692	66
15°	674	672	676	676	676	190
25°	625	625	634	636	636	288
35°	556	559	570	578	583	348
45°	467	475	493	514	524	360
55°	361	373	409	443	458	322
65°	239	261	317	360	379	235
75°	108	152	217	216	209	117
85°	24	36	38	34	35	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	695.2	695.2	695.2	695.2	695.2
2.5°	698.7	695.2	696.4	695.2	693.0
5°	696.4	693.0	694.1	693.0	691.8
7.5°	694.1	690.7	691.8	690.7	690.7
10°	689.6	686.2	688.4	687.3	686.2
12.5°	682.8	680.5	682.8	681.6	681.6
15°	673.7	672.5	675.9	675.9	675.9
17.5°	664.6	663.4	668.0	668.0	668.0
20°	653.2	652.1	658.9	658.9	658.9
22.5°	639.6	638.4	647.5	647.5	647.5
25°	624.8	624.8	633.9	636.2	636.2
27.5°	610.0	610.0	620.3	623.7	623.7
30°	594.1	594.1	604.4	608.9	611.2
32.5°	574.8	577.1	588.5	594.1	596.4
35°	555.5	558.9	570.3	578.2	582.8
37.5°	535.1	538.5	552.1	561.2	566.9
40°	513.5	518.0	532.8	544.2	551.0
42.5°	489.6	496.4	513.5	528.3	537.3
45°	466.9	474.9	493.0	513.5	523.7
47.5°	441.9	451.0	471.5	497.6	507.8
50°	415.8	424.9	449.9	479.4	490.8
52.5°	389.7	399.9	429.4	461.2	474.9
55°	361.3	372.6	409.0	443.0	457.8
57.5°	331.7	345.4	386.2	422.6	438.5
60°	301.0	318.1	363.5	402.2	419.2
62.5°	269.2	289.7	340.8	381.7	399.9
65°	238.6	261.3	317.0	360.1	379.4
67.5°	205.6	234.0	293.1	339.7	357.8
70°	172.7	205.6	268.1	315.8	334.0
72.5°	139.7	179.5	243.1	286.3	286.3
75°	107.9	152.2	217.0	215.8	209.0
77.5°	81.8	127.2	178.4	152.2	153.4
80°	59.1	102.2	112.5	112.5	113.6
82.5°	39.8	78.4	72.7	71.6	73.8
85°	23.9	36.4	37.5	34.1	35.2
87.5°	11.4	12.5	10.2	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)