

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: P263132

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263132  
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-LD5-40SE-SQP-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2532.0 lumens  
Efficiency: N/A  
Efficacy: 83.4 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

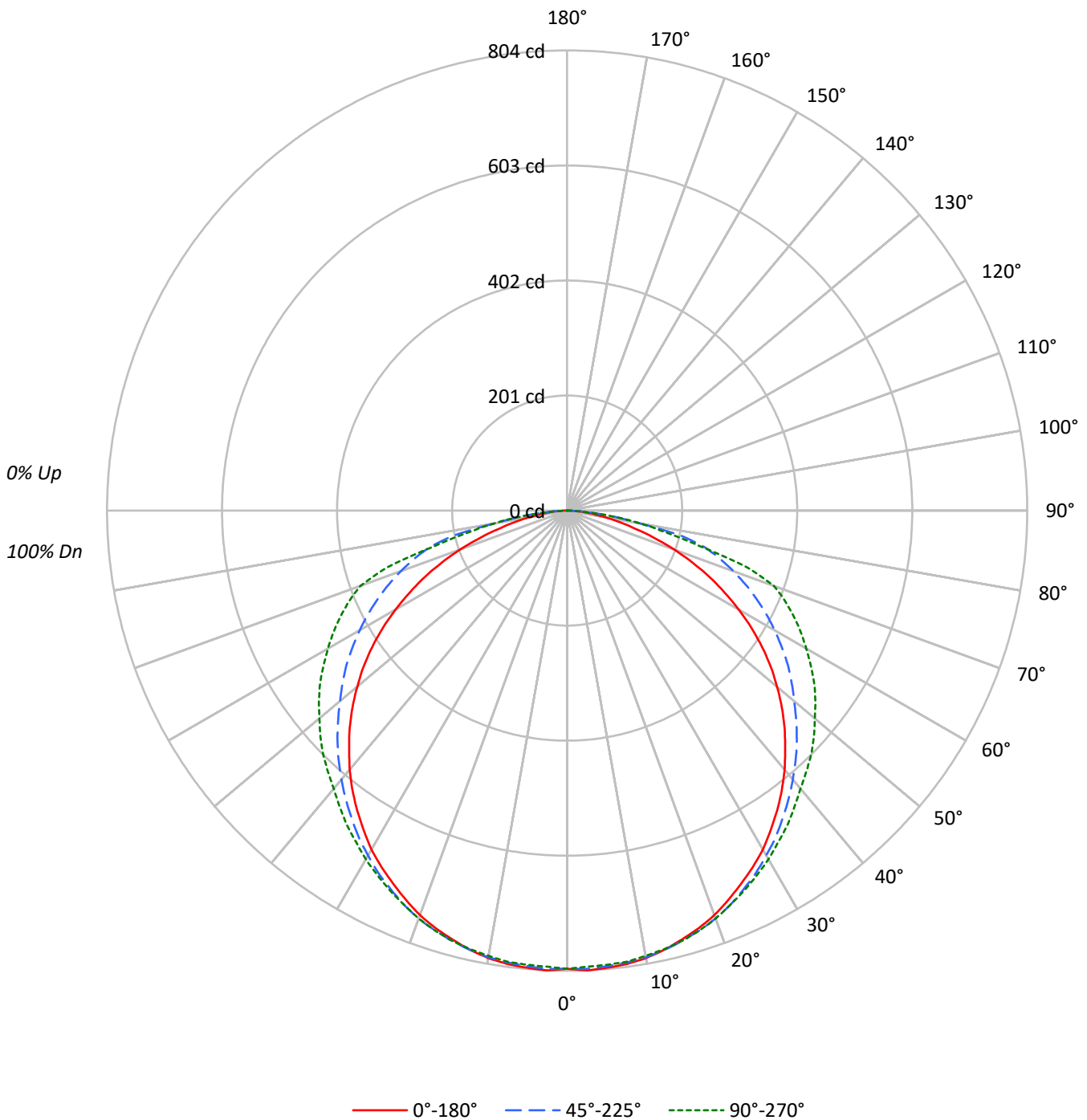
Input Watts (W): 30.350178  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1077	1077	1077
5°	1083	1079	1076
10°	1085	1083	1079
15°	1080	1084	1084
20°	1077	1086	1086
25°	1068	1083	1087
30°	1063	1081	1093
35°	1050	1078	1102
40°	1038	1077	1114
45°	1023	1080	1147
50°	1002	1084	1183
55°	976	1104	1236
60°	933	1126	1299
65°	875	1162	1391
70°	782	1214	1513
75°	646	1299	1251
80°	527	1003	1013
85°	425	667	625



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.0	3.0
10°-20°	219.4	8.7
20°-30°	335.3	13.2
30°-40°	410.0	16.2
40°-50°	438.7	17.3
50°-60°	420.1	16.6
60°-70°	355.4	14.0
70°-80°	225.3	8.9
80°-90°	51.8	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°	630.6	24.9
0°-40°	1040.7	41.1
0°-60°	1899.5	75.0
0°-90°	2532.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2532.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	800	800	800	800	800	
5°	802	798	799	798	796	76
15°	776	774	778	778	778	219
25°	719	719	730	732	732	332
35°	640	644	656	666	671	400
45°	538	547	568	591	603	414
55°	416	429	471	510	527	371
65°	275	301	365	415	437	271
75°	124	175	250	248	241	135
85°	28	42	43	39	40	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	800.4	800.4	800.4	800.4	800.4
2.5°	804.3	800.4	801.7	800.4	797.8
5°	801.7	797.8	799.1	797.8	796.5
7.5°	799.1	795.2	796.5	795.2	795.2
10°	793.9	789.9	792.6	791.3	789.9
12.5°	786.0	783.4	786.0	784.7	784.7
15°	775.6	774.3	778.2	778.2	778.2
17.5°	765.1	763.8	769.0	769.0	769.0
20°	752.0	750.7	758.6	758.6	758.6
22.5°	736.3	735.0	745.5	745.5	745.5
25°	719.3	719.3	729.8	732.4	732.4
27.5°	702.3	702.3	714.1	718.0	718.0
30°	684.0	684.0	695.8	701.0	703.6
32.5°	661.8	664.4	677.5	684.0	686.6
35°	639.5	643.5	656.5	665.7	670.9
37.5°	616.0	619.9	635.6	646.1	652.6
40°	591.2	596.4	613.4	626.5	634.3
42.5°	563.7	571.5	591.2	608.2	618.6
45°	537.5	546.7	567.6	591.2	602.9
47.5°	508.8	519.2	542.8	572.8	584.6
50°	478.7	489.1	517.9	551.9	565.0
52.5°	448.6	460.4	494.4	531.0	546.7
55°	415.9	429.0	470.8	510.1	527.1
57.5°	381.9	397.6	444.7	486.5	504.8
60°	346.6	366.2	418.5	463.0	482.6
62.5°	310.0	333.5	392.4	439.4	460.4
65°	274.7	300.8	364.9	414.6	436.8
67.5°	236.7	269.4	337.4	391.1	412.0
70°	198.8	236.7	308.7	363.6	384.5
72.5°	160.9	206.6	279.9	329.6	329.6
75°	124.2	175.3	249.8	248.5	240.6
77.5°	94.2	146.5	205.3	175.3	176.6
80°	68.0	117.7	129.5	129.5	130.8
82.5°	45.8	90.2	83.7	82.4	85.0
85°	27.5	41.9	43.2	39.2	40.5
87.5°	13.1	14.4	11.8	7.8	7.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)