

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: P263149

Luminaire Tested: **24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263149  
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-LD5-30-SQP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1865.7 lumens  
Efficiency: N/A  
Efficacy: 92.7 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

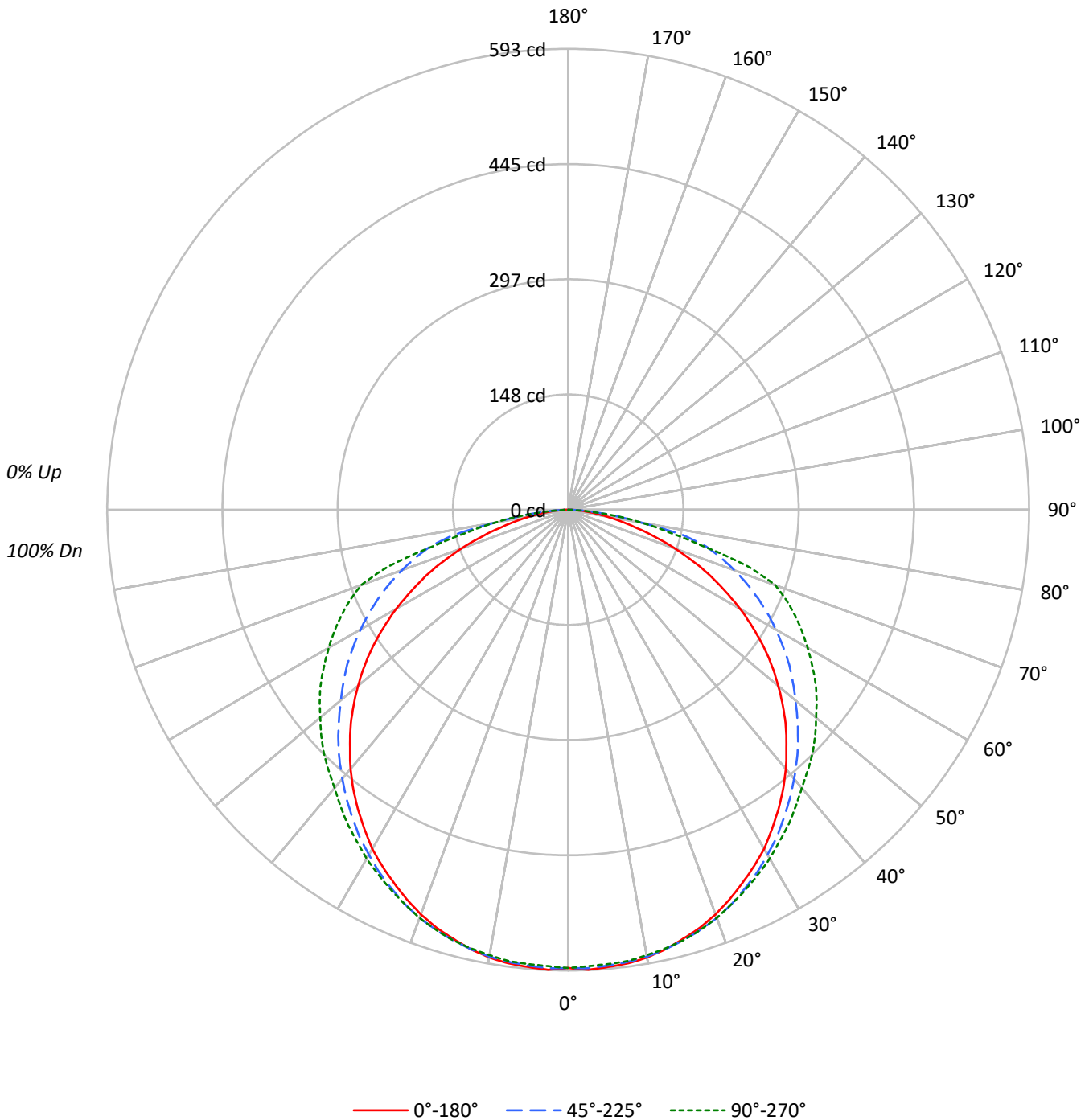
Input Watts (W): 20.133198  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	794	794	794
5°	798	795	793
10°	799	798	795
15°	796	799	799
20°	793	800	800
25°	787	798	801
30°	783	797	806
35°	774	795	812
40°	765	794	821
45°	754	796	845
50°	738	799	871
55°	719	814	911
60°	687	830	957
65°	644	856	1025
70°	576	895	1114
75°	476	957	922
80°	388	739	747
85°	312	491	462



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.0	3.0
10°-20°	161.6	8.7
20°-30°	247.0	13.2
30°-40°	302.1	16.2
40°-50°	323.3	17.3
50°-60°	309.6	16.6
60°-70°	261.9	14.0
70°-80°	166.0	8.9
80°-90°	38.2	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°	464.7	24.9
0°-40°	766.8	41.1
0°-60°	1399.6	75.0
0°-90°	1865.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1865.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	591	588	589	588	587	56
15°	572	570	573	573	573	161
25°	530	530	538	540	540	245
35°	471	474	484	490	494	295
45°	396	403	418	436	444	305
55°	306	316	347	376	388	273
65°	202	222	269	306	322	199
75°	92	129	184	183	177	100
85°	20	31	32	29	30	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	589.8	589.8	589.8	589.8	589.8
2.5°	592.7	589.8	590.7	589.8	587.9
5°	590.7	587.9	588.8	587.9	586.9
7.5°	588.8	585.9	586.9	585.9	585.9
10°	585.0	582.1	584.0	583.0	582.1
12.5°	579.2	577.3	579.2	578.2	578.2
15°	571.5	570.5	573.4	573.4	573.4
17.5°	563.8	562.8	566.7	566.7	566.7
20°	554.1	553.2	558.9	558.9	558.9
22.5°	542.6	541.6	549.3	549.3	549.3
25°	530.0	530.0	537.7	539.7	539.7
27.5°	517.5	517.5	526.2	529.1	529.1
30°	504.0	504.0	512.7	516.5	518.5
32.5°	487.6	489.6	499.2	504.0	505.9
35°	471.2	474.1	483.8	490.5	494.4
37.5°	453.9	456.8	468.4	476.1	480.9
40°	435.6	439.4	452.0	461.6	467.4
42.5°	415.4	421.1	435.6	448.1	455.8
45°	396.1	402.8	418.2	435.6	444.3
47.5°	374.9	382.6	399.9	422.1	430.8
50°	352.7	360.4	381.6	406.7	416.3
52.5°	330.5	339.2	364.3	391.3	402.8
55°	306.5	316.1	346.9	375.8	388.4
57.5°	281.4	293.0	327.7	358.5	372.0
60°	255.4	269.8	308.4	341.1	355.6
62.5°	228.4	245.7	289.1	323.8	339.2
65°	202.4	221.6	268.9	305.5	321.9
67.5°	174.4	198.5	248.6	288.1	303.6
70°	146.5	174.4	227.4	267.9	283.3
72.5°	118.5	152.3	206.2	242.9	242.9
75°	91.6	129.1	184.1	183.1	177.3
77.5°	69.4	107.9	151.3	129.1	130.1
80°	50.1	86.7	95.4	95.4	96.4
82.5°	33.7	66.5	61.7	60.7	62.6
85°	20.2	30.8	31.8	28.9	29.9
87.5°	9.6	10.6	8.7	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)