

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: P263124

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263124  
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-LD5-30SE-SQP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2108.0 lumens  
Efficiency: N/A  
Efficacy: 94.7 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

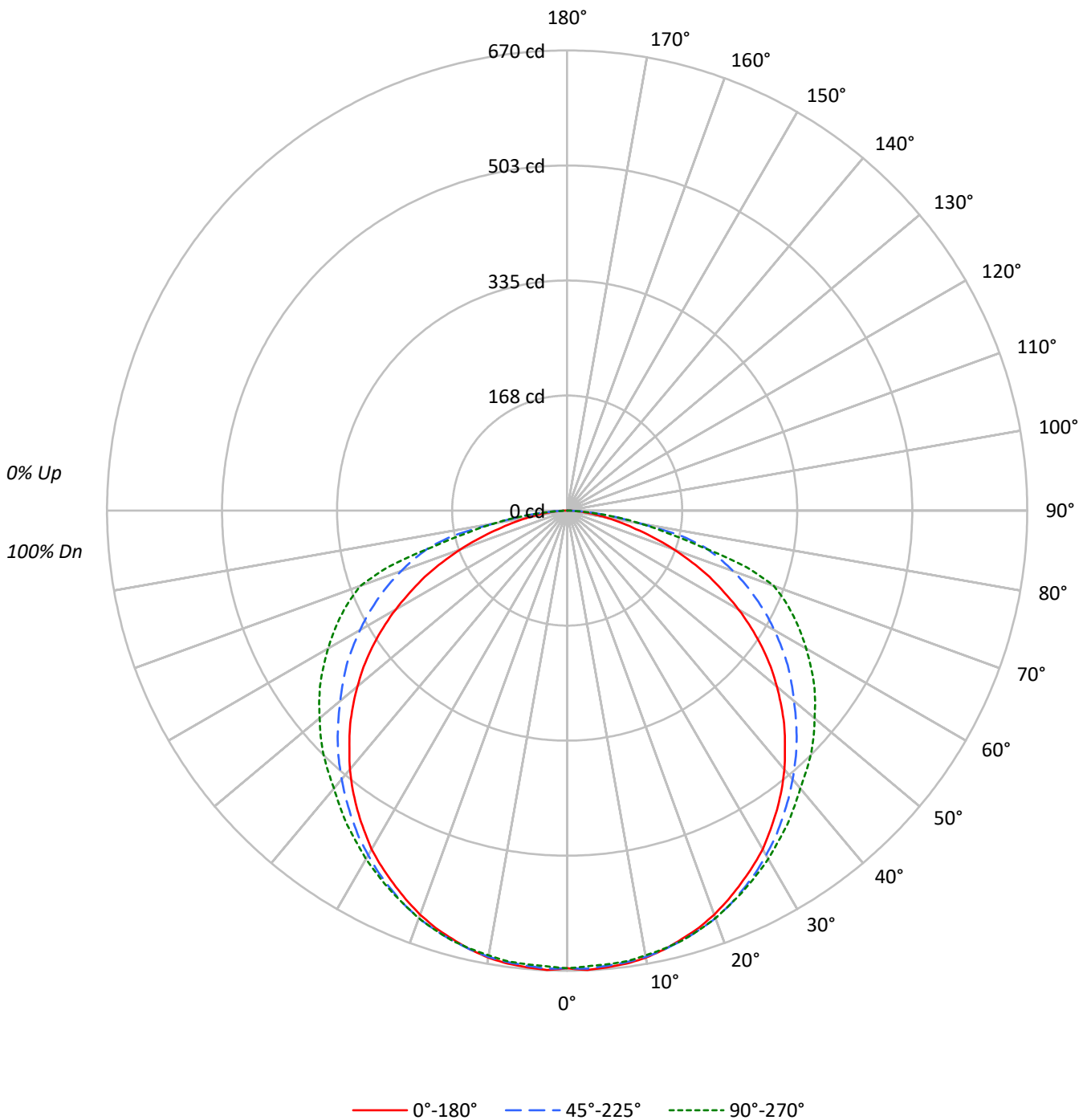
Input Watts (W): 22.262526  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	897	897	897
5°	902	899	896
10°	903	901	899
15°	899	902	902
20°	896	904	904
25°	889	902	905
30°	885	900	910
35°	874	898	918
40°	865	897	928
45°	852	899	955
50°	834	903	985
55°	812	920	1029
60°	776	938	1081
65°	728	967	1158
70°	651	1011	1259
75°	538	1081	1041
80°	439	835	844
85°	354	554	522



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.3	3.0
10°-20°	182.6	8.7
20°-30°	279.1	13.2
30°-40°	341.4	16.2
40°-50°	365.3	17.3
50°-60°	349.8	16.6
60°-70°	295.9	14.0
70°-80°	187.5	8.9
80°-90°	43.1	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°	525.0	24.9
0°-40°	866.4	41.1
0°-60°	1581.4	75.0
0°-90°	2108.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2108.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	668	664	665	664	663	64
15°	646	645	648	648	648	182
25°	599	599	608	610	610	276
35°	532	536	547	554	559	333
45°	448	455	473	492	502	345
55°	346	357	392	425	439	309
65°	229	250	304	345	364	225
75°	103	146	208	207	200	112
85°	23	35	36	33	34	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	666.4	666.4	666.4	666.4	666.4
2.5°	669.6	666.4	667.5	666.4	664.2
5°	667.5	664.2	665.3	664.2	663.1
7.5°	665.3	662.0	663.1	662.0	662.0
10°	660.9	657.7	659.8	658.8	657.7
12.5°	654.4	652.2	654.4	653.3	653.3
15°	645.7	644.6	647.9	647.9	647.9
17.5°	637.0	635.9	640.2	640.2	640.2
20°	626.1	625.0	631.5	631.5	631.5
22.5°	613.0	611.9	620.6	620.6	620.6
25°	598.9	598.9	607.6	609.8	609.8
27.5°	584.7	584.7	594.5	597.8	597.8
30°	569.5	569.5	579.3	583.6	585.8
32.5°	551.0	553.1	564.0	569.5	571.6
35°	532.4	535.7	546.6	554.2	558.6
37.5°	512.8	516.1	529.2	537.9	543.3
40°	492.2	496.5	510.7	521.6	528.1
42.5°	469.3	475.8	492.2	506.3	515.0
45°	447.5	455.1	472.6	492.2	502.0
47.5°	423.6	432.3	451.9	476.9	486.7
50°	398.5	407.2	431.2	459.5	470.4
52.5°	373.5	383.3	411.6	442.1	455.1
55°	346.3	357.1	392.0	424.7	438.8
57.5°	317.9	331.0	370.2	405.1	420.3
60°	288.5	304.9	348.4	385.5	401.8
62.5°	258.1	277.7	326.7	365.9	383.3
65°	228.7	250.4	303.8	345.2	363.7
67.5°	197.1	224.3	280.9	325.6	343.0
70°	165.5	197.1	257.0	302.7	320.1
72.5°	133.9	172.0	233.0	274.4	274.4
75°	103.4	145.9	208.0	206.9	200.3
77.5°	78.4	122.0	170.9	145.9	147.0
80°	56.6	98.0	107.8	107.8	108.9
82.5°	38.1	75.1	69.7	68.6	70.8
85°	22.9	34.8	35.9	32.7	33.8
87.5°	10.9	12.0	9.8	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)