

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: P263162

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263162  
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-LD5-45-SQP-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2309.9 lumens  
Efficiency: N/A  
Efficacy: 71.8 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

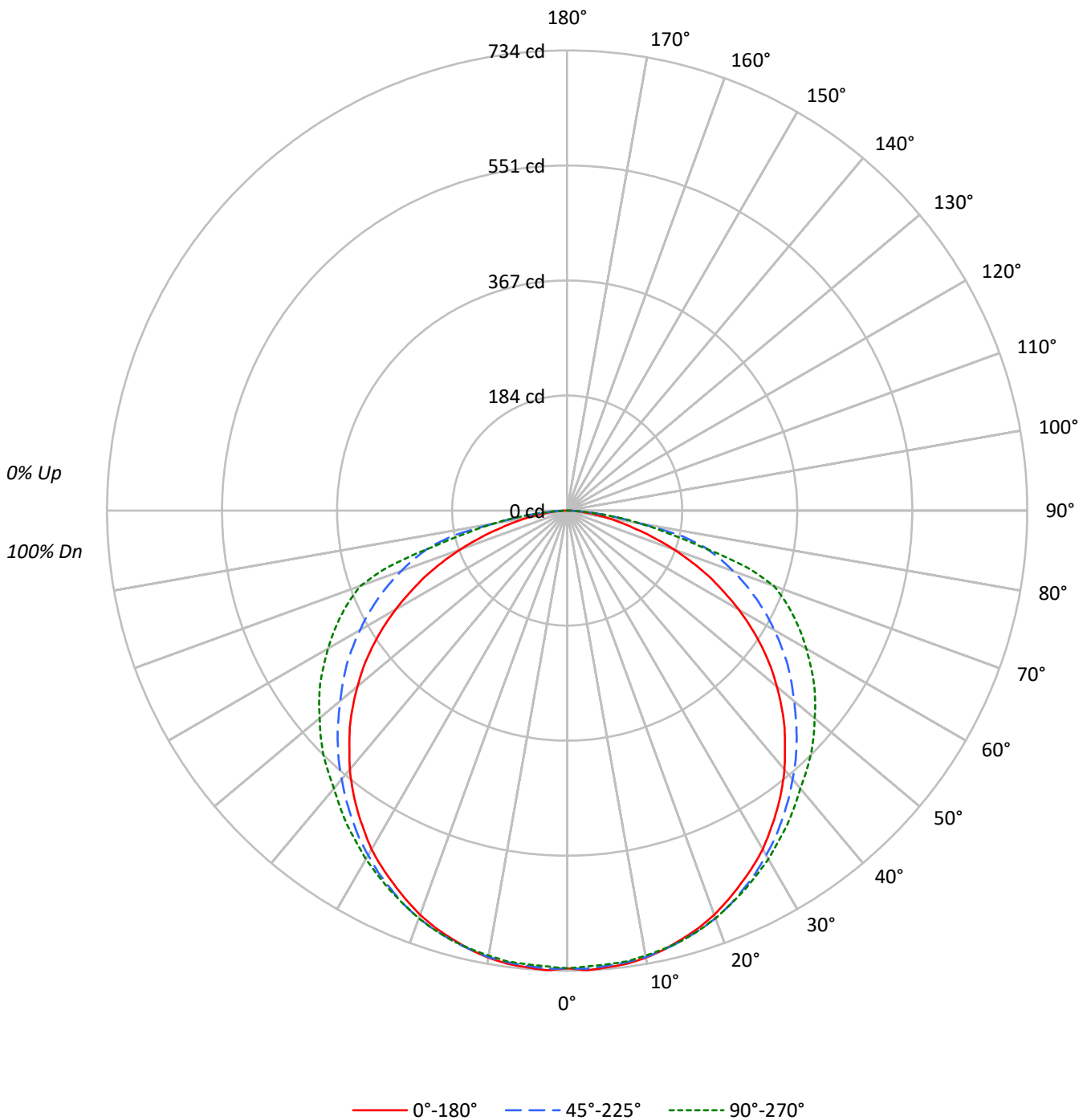
Input Watts (W): 32.156982  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	982	982	982
5°	988	985	981
10°	989	988	985
15°	986	989	989
20°	982	991	991
25°	974	988	992
30°	969	986	997
35°	958	984	1005
40°	947	983	1016
45°	933	985	1047
50°	914	989	1079
55°	890	1008	1128
60°	851	1027	1185
65°	798	1060	1269
70°	714	1108	1380
75°	590	1185	1141
80°	480	915	924
85°	387	608	571



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.3	3.0
10°-20°	200.1	8.7
20°-30°	305.8	13.2
30°-40°	374.1	16.2
40°-50°	400.2	17.3
50°-60°	383.3	16.6
60°-70°	324.2	14.0
70°-80°	205.5	8.9
80°-90°	47.3	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°	575.3	24.9
0°-40°	949.4	41.1
0°-60°	1732.9	75.0
0°-90°	2309.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2309.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	731	728	729	728	727	70
15°	708	706	710	710	710	200
25°	656	656	666	668	668	303
35°	584	587	599	607	612	365
45°	490	499	518	539	550	378
55°	379	391	430	465	481	338
65°	251	274	333	378	398	247
75°	113	160	228	227	220	123
85°	25	38	39	36	37	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	730.2	730.2	730.2	730.2	730.2
2.5°	733.8	730.2	731.4	730.2	727.8
5°	731.4	727.8	729.0	727.8	726.6
7.5°	729.0	725.4	726.6	725.4	725.4
10°	724.2	720.7	723.1	721.9	720.7
12.5°	717.1	714.7	717.1	715.9	715.9
15°	707.5	706.4	709.9	709.9	709.9
17.5°	698.0	696.8	701.6	701.6	701.6
20°	686.1	684.9	692.0	692.0	692.0
22.5°	671.7	670.6	680.1	680.1	680.1
25°	656.2	656.2	665.8	668.2	668.2
27.5°	640.7	640.7	651.5	655.0	655.0
30°	624.0	624.0	634.8	639.5	641.9
32.5°	603.7	606.1	618.1	624.0	626.4
35°	583.5	587.0	599.0	607.3	612.1
37.5°	562.0	565.6	579.9	589.4	595.4
40°	539.3	544.1	559.6	571.5	578.7
42.5°	514.3	521.4	539.3	554.8	564.4
45°	490.4	498.7	517.8	539.3	550.0
47.5°	464.1	473.7	495.2	522.6	533.3
50°	436.7	446.2	472.5	503.5	515.4
52.5°	409.3	420.0	451.0	484.4	498.7
55°	379.4	391.4	429.5	465.3	480.8
57.5°	348.4	362.7	405.7	443.9	460.6
60°	316.2	334.1	381.8	422.4	440.3
62.5°	282.8	304.3	357.9	400.9	420.0
65°	250.6	274.4	332.9	378.2	398.5
67.5°	216.0	245.8	307.8	356.8	375.8
70°	181.4	216.0	281.6	331.7	350.8
72.5°	146.8	188.5	255.3	300.7	300.7
75°	113.4	159.9	227.9	226.7	219.5
77.5°	85.9	133.6	187.3	159.9	161.1
80°	62.0	107.4	118.1	118.1	119.3
82.5°	41.8	82.3	76.4	75.2	77.6
85°	25.1	38.2	39.4	35.8	37.0
87.5°	11.9	13.1	10.7	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)