

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: P230508

Luminaire Tested: **24CZ-LD5-40SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230508
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-40SE-RDP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2192.1 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

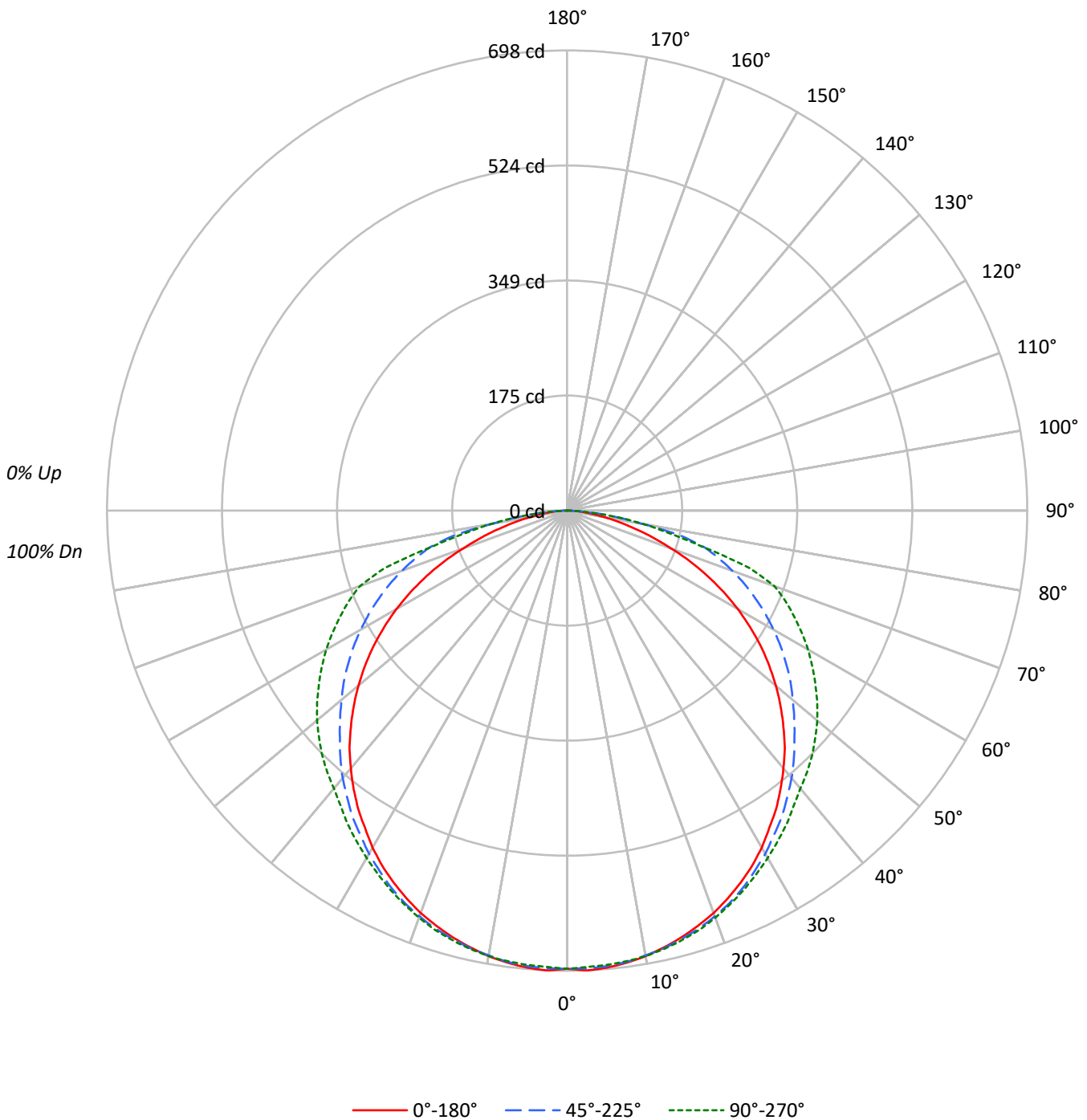
Input Watts (W): 32.55
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82	82	
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67	67	
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	56	
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47	47	
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41	41	
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35	35	
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31	31	
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27	27	
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25	25	
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22	22	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	935	935	935
5°	940	937	934
10°	938	936	938
15°	933	936	939
20°	930	938	941
25°	924	937	942
30°	917	934	946
35°	908	932	953
40°	896	931	967
45°	883	928	1000
50°	865	935	1037
55°	840	952	1078
60°	804	973	1135
65°	749	1003	1209
70°	662	1048	1316
75°	555	1122	1105
80°	443	886	920
85°	350	599	550



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	3.0
10°-20°	189.7	8.7
20°-30°	289.7	13.2
30°-40°	354.2	16.2
40°-50°	379.1	17.3
50°-60°	363.7	16.6
60°-70°	307.1	14.0
70°-80°	196.2	9.0
80°-90°	46.4	2.1
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°	545.3	24.9
0°-40°	899.6	41.0
0°-60°	1642.4	74.9
0°-90°	2192.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2192.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	695	695	695	695	695	
5°	696	692	694	693	692	66
15°	670	668	672	674	674	189
25°	623	622	631	633	634	287
35°	552	557	568	575	580	345
45°	464	472	488	510	526	358
55°	358	370	406	442	460	320
65°	235	258	315	359	380	232
75°	107	152	216	220	213	115
85°	23	38	39	38	36	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	694.9	694.9	694.9	694.9	694.9
2.5°	698.2	693.8	694.9	694.9	692.8
5°	696.0	691.7	693.8	692.8	691.7
7.5°	691.7	688.5	690.6	690.6	689.5
10°	686.3	683.1	685.2	686.3	686.3
12.5°	678.7	676.6	679.8	679.8	680.9
15°	670.1	668.0	672.3	674.4	674.4
17.5°	660.4	659.3	664.7	665.8	666.9
20°	649.6	648.5	655.0	655.0	657.2
22.5°	636.7	635.6	644.2	644.2	646.4
25°	622.6	621.6	631.3	633.4	634.5
27.5°	607.5	606.4	616.2	619.4	621.6
30°	590.3	590.3	601.0	605.4	608.6
32.5°	570.8	574.1	583.8	590.3	594.6
35°	552.5	556.8	567.6	575.2	580.5
37.5°	532.0	536.3	548.2	557.9	564.4
40°	510.4	515.8	529.8	540.6	550.3
42.5°	488.8	494.2	509.3	525.5	538.5
45°	464.0	471.6	487.7	510.4	525.5
47.5°	439.2	446.7	467.2	495.3	510.4
50°	413.3	421.9	446.7	479.1	495.3
52.5°	386.3	396.0	427.3	461.8	478.0
55°	358.3	370.1	405.7	442.4	459.7
57.5°	329.1	342.1	384.2	423.0	441.3
60°	298.9	315.1	361.5	402.5	421.9
62.5°	267.6	287.0	338.8	380.9	401.4
65°	235.2	257.9	315.1	359.3	379.8
67.5°	201.8	232.0	291.4	337.8	358.3
70°	168.3	203.9	266.5	314.0	334.5
72.5°	137.0	178.0	241.7	286.0	290.3
75°	106.8	152.2	215.8	220.1	212.6
77.5°	79.9	126.3	178.0	158.6	157.5
80°	57.2	101.4	114.4	117.6	118.7
82.5°	37.8	76.6	74.5	76.6	75.5
85°	22.7	37.8	38.8	37.8	35.6
87.5°	10.8	14.0	10.8	9.7	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)