

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: P230911

Luminaire Tested: **14CZ-LD5-20-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230911
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-S-UNV-L950-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1986.0 lumens
Efficiency: N/A
Efficacy: 121.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

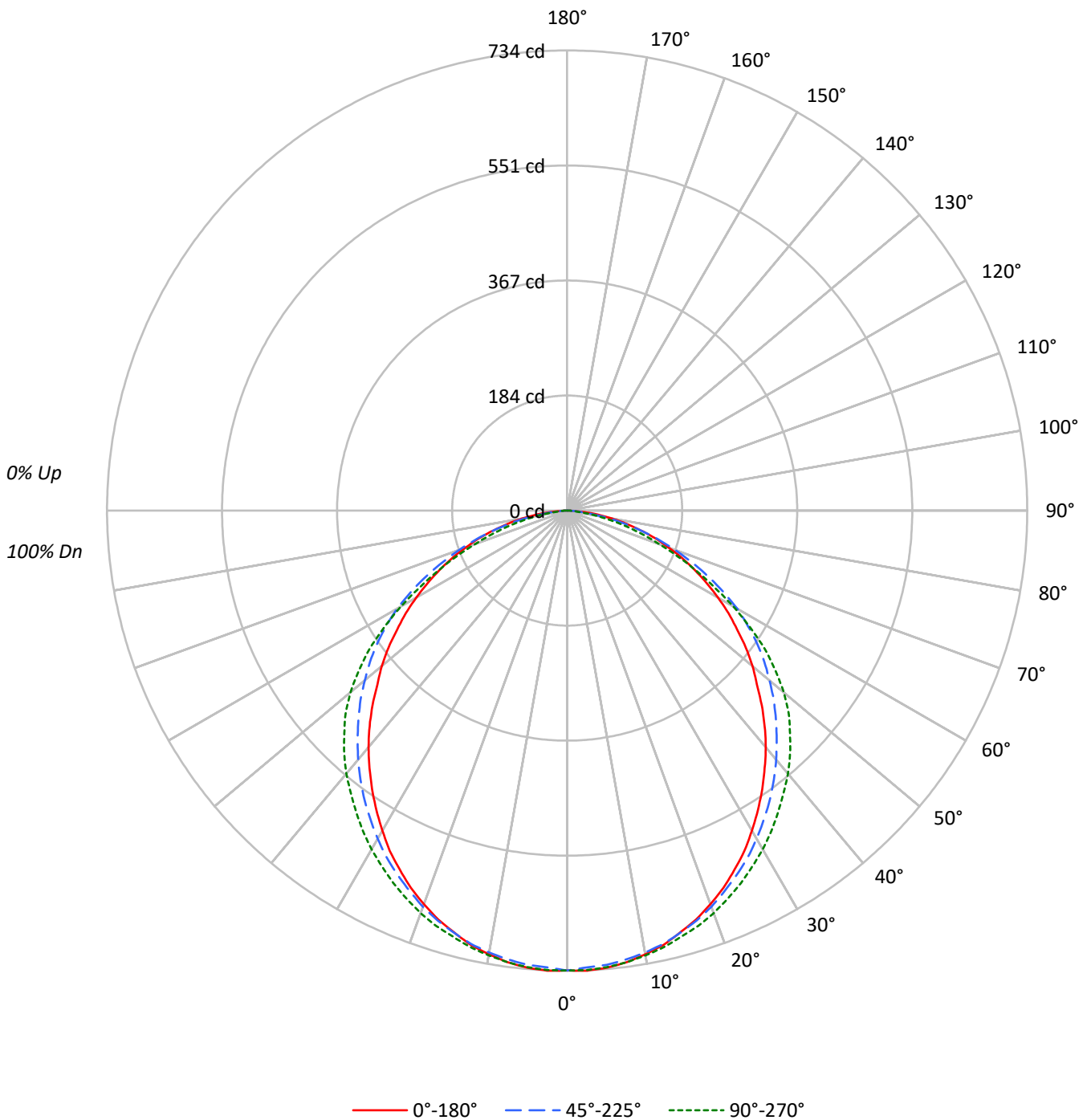
Input Watts (W): 16.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1974	1974	1974
5°	1977	1965	1975
10°	1964	1956	1968
15°	1940	1943	1960
20°	1913	1926	1956
25°	1876	1902	1947
30°	1831	1878	1939
35°	1782	1852	1927
40°	1731	1822	1924
45°	1670	1792	1913
50°	1615	1763	1889
55°	1553	1735	1806
60°	1496	1686	1648
65°	1431	1578	1448
70°	1351	1434	1226
75°	1260	1242	1012
80°	1111	959	741
85°	874	463	411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.3	3.5
10°-20°	197.5	9.9
20°-30°	296.4	14.9
30°-40°	353.3	17.8
40°-50°	363.9	18.3
50°-60°	324.3	16.3
60°-70°	233.7	11.8
70°-80°	122.2	6.2
80°-90°	25.3	1.3
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°	563.2	28.4
0°-40°	916.5	46.1
0°-60°	1604.8	80.8
0°-90°	1986.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1986.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	734	734	734	734	734	
5°	732	730	727	732	731	69
15°	696	697	697	704	704	197
25°	632	635	641	653	656	291
35°	542	550	564	582	587	339
45°	439	449	471	497	503	339
55°	331	342	370	387	385	297
65°	225	233	248	236	227	223
75°	121	127	120	104	97	128
85°	28	25	15	13	13	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	733.6	733.6	733.6	733.6	733.6
2.5°	734.5	732.7	729.2	733.6	733.6
5°	731.9	730.1	727.4	731.9	731.0
7.5°	726.5	724.8	722.1	727.4	726.5
10°	718.6	717.7	715.9	721.2	720.4
12.5°	709.7	708.9	708.0	713.3	713.3
15°	696.5	697.3	697.3	704.4	703.5
17.5°	684.1	685.0	685.8	694.7	694.7
20°	668.1	669.0	672.6	682.3	683.2
22.5°	651.3	652.2	656.6	668.1	669.9
25°	631.9	635.4	640.7	653.1	655.8
27.5°	612.4	615.0	623.9	638.1	639.8
30°	589.4	594.7	604.4	620.4	623.9
32.5°	566.4	572.6	584.1	601.8	606.2
35°	542.5	549.6	563.7	582.3	586.7
37.5°	517.7	523.9	541.6	561.1	567.3
40°	492.9	499.1	518.6	540.7	547.8
42.5°	466.4	475.2	494.7	519.5	526.5
45°	438.9	448.7	470.8	497.3	502.7
47.5°	410.6	421.2	446.9	473.5	479.6
50°	385.8	395.6	421.2	446.9	451.3
52.5°	359.3	368.1	396.5	417.7	418.6
55°	331.0	341.6	369.9	386.7	385.0
57.5°	305.3	314.2	341.6	350.4	345.1
60°	277.9	285.8	313.3	314.2	306.2
62.5°	251.3	259.3	280.5	274.3	264.6
65°	224.8	232.7	247.8	236.3	227.4
67.5°	199.1	206.2	215.0	200.0	191.2
70°	171.7	181.4	182.3	164.6	155.8
72.5°	147.8	153.1	151.3	134.5	126.5
75°	121.2	127.4	119.5	103.5	97.3
77.5°	96.5	100.9	90.3	75.2	70.8
80°	71.7	74.3	61.9	50.4	47.8
82.5°	48.7	48.7	35.4	27.4	24.8
85°	28.3	24.8	15.0	13.3	13.3
87.5°	9.7	6.2	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)