

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: P230887

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-UNV-L950-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1947.0 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

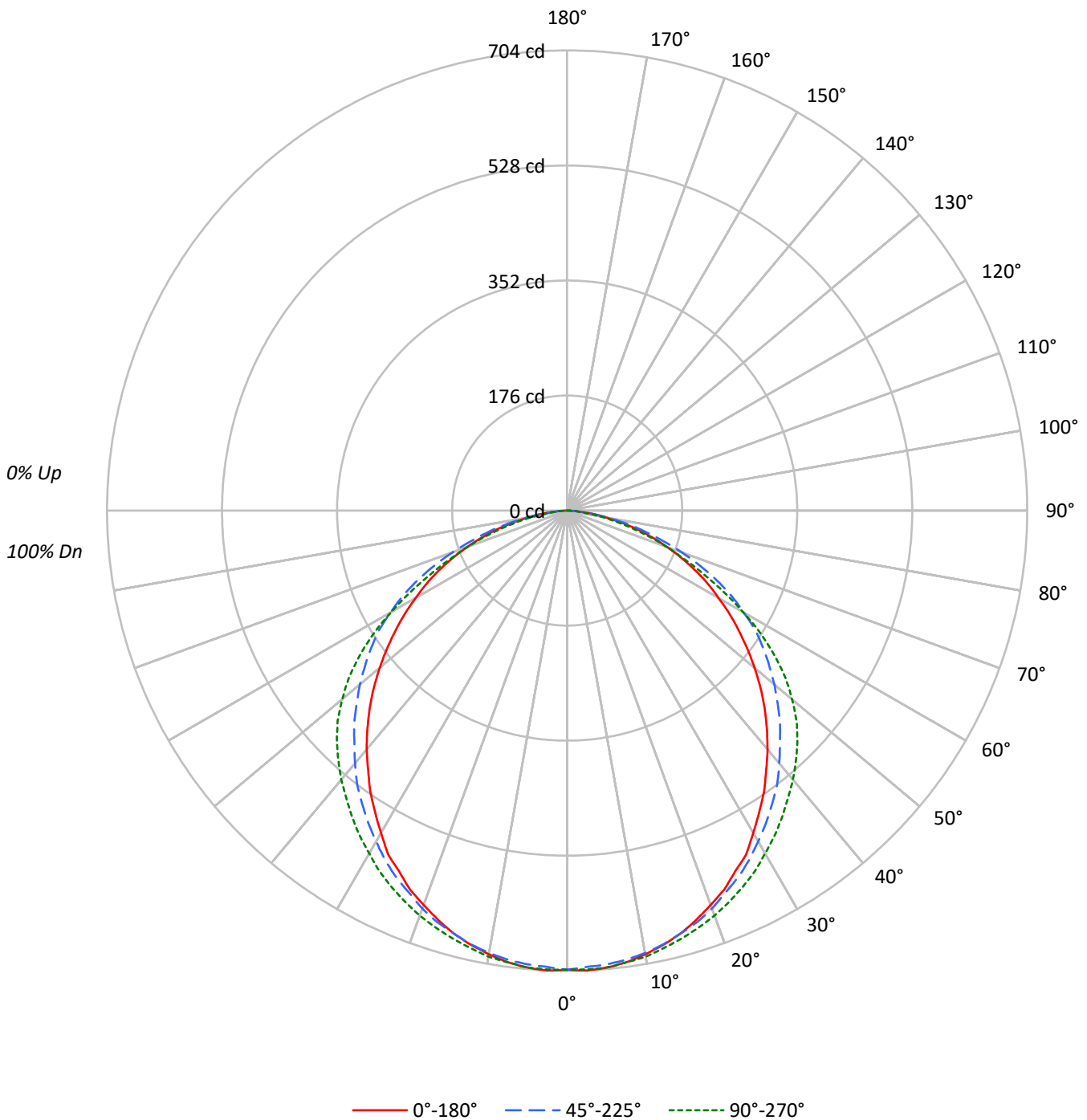
Input Watts (W): 16.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1891	1891	1891
5°	1895	1883	1895
10°	1883	1878	1894
15°	1867	1867	1888
20°	1839	1855	1888
25°	1807	1838	1887
30°	1769	1817	1882
35°	1725	1797	1882
40°	1676	1774	1888
45°	1625	1753	1896
50°	1567	1732	1881
55°	1504	1716	1819
60°	1441	1679	1674
65°	1375	1607	1467
70°	1276	1465	1269
75°	1157	1278	1048
80°	922	1012	773
85°	651	562	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.5	3.4
10°-20°	189.9	9.8
20°-30°	286.3	14.7
30°-40°	343.2	17.6
40°-50°	356.2	18.3
50°-60°	321.3	16.5
60°-70°	234.3	12.0
70°-80°	123.0	6.3
80°-90°	26.2	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°	542.7	27.9
0°-40°	886.0	45.5
0°-60°	1563.5	80.3
0°-90°	1947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1947.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	702	700	697	702	702	67
15°	670	670	670	678	678	189
25°	609	611	619	632	635	281
35°	525	531	547	567	573	328
45°	427	436	461	489	498	329
55°	321	332	366	390	388	287
65°	216	228	252	243	230	213
75°	111	127	123	106	101	117
85°	21	26	18	15	14	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	702.6	702.6	702.6	702.6	702.6
2.5°	704.5	702.6	698.8	702.6	702.6
5°	701.7	699.7	696.9	701.7	701.7
7.5°	696.9	694.9	693.0	697.8	696.9
10°	689.2	688.2	687.3	693.0	693.0
12.5°	680.5	680.5	679.6	686.3	685.3
15°	670.0	670.0	670.0	677.7	677.7
17.5°	656.5	658.5	660.4	669.0	669.0
20°	642.1	644.1	647.9	658.5	659.4
22.5°	627.7	628.7	632.5	645.0	647.9
25°	608.6	611.4	619.1	632.5	635.4
27.5°	593.2	594.2	602.8	618.1	622.0
30°	569.2	575.9	584.6	601.8	605.7
32.5°	547.1	552.9	566.3	584.6	590.3
35°	525.0	530.8	547.1	567.3	573.0
37.5°	500.1	508.7	527.9	548.1	554.8
40°	477.1	484.7	504.9	529.8	537.5
42.5°	452.1	459.8	481.8	509.7	518.3
45°	427.1	435.8	460.7	488.6	498.2
47.5°	401.2	410.8	436.7	467.5	476.1
50°	374.3	384.9	413.7	445.4	449.2
52.5°	347.5	359.0	389.7	417.5	421.4
55°	320.6	332.1	365.7	389.7	387.8
57.5°	294.7	307.2	341.7	354.2	352.3
60°	267.8	281.2	312.0	317.7	311.0
62.5°	242.8	255.3	284.1	279.3	270.7
65°	216.0	228.4	252.4	242.8	230.4
67.5°	189.1	204.5	219.8	203.5	193.9
70°	162.2	179.5	186.2	169.9	161.3
72.5°	136.3	154.5	152.6	136.3	130.5
75°	111.3	126.7	122.9	106.5	100.8
77.5°	84.5	101.7	93.1	79.7	74.9
80°	59.5	74.9	65.3	53.8	49.9
82.5°	39.4	49.9	40.3	31.7	28.8
85°	21.1	25.9	18.2	15.4	14.4
87.5°	8.6	7.7	6.7	6.7	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)