

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: P387513

Luminaire Tested: **14CZ2-39HE-SQR-UNV-L950-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P387513
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3368.7 lumens
Efficiency: N/A
Efficacy: 115.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

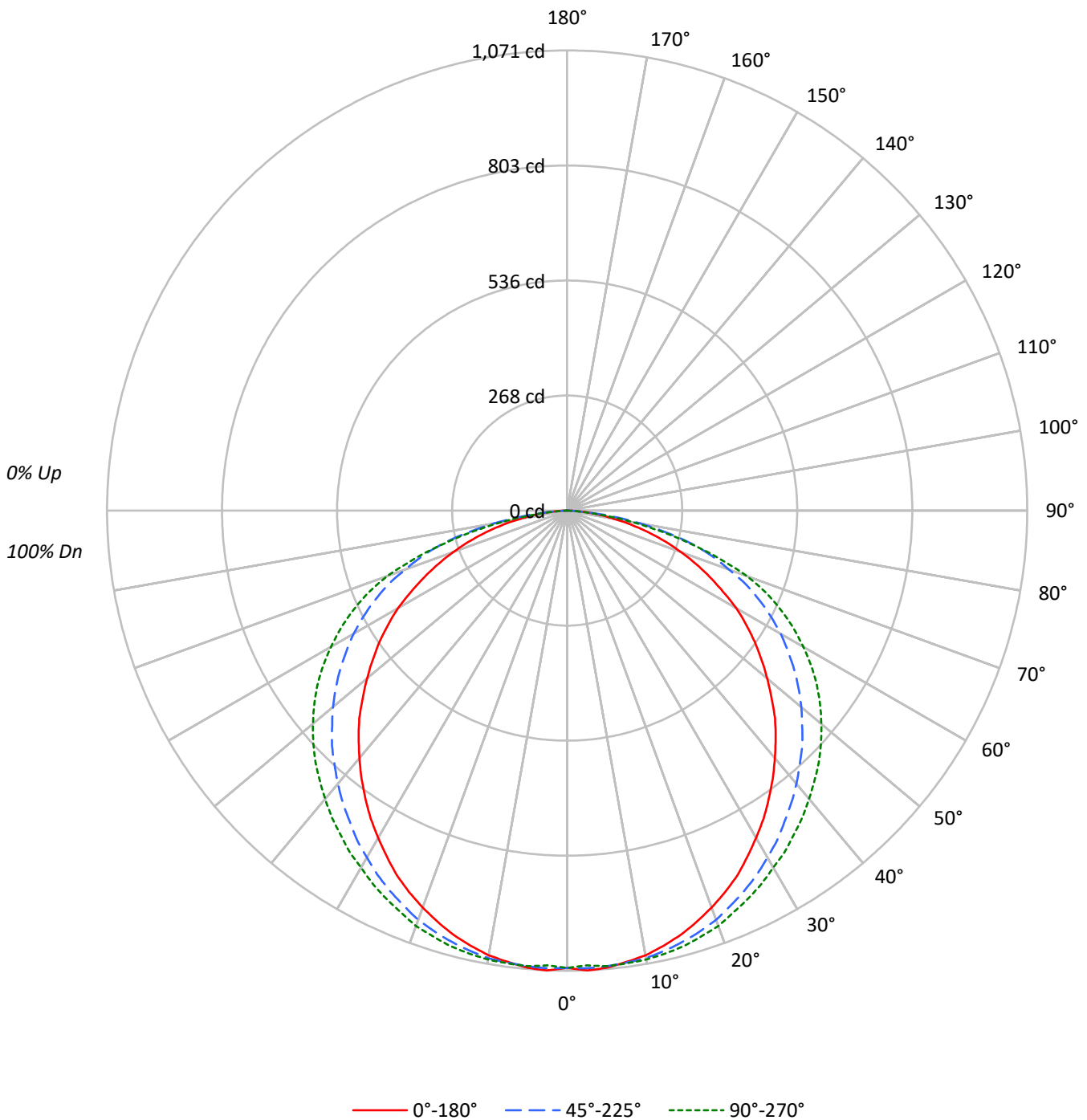
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83					83			
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68					68			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56					56			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48					48			
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41					41			
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35					35			
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31					31			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28					28			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25					25			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22					22			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2865	2865	2865
5°	2885	2875	2875
10°	2872	2890	2899
15°	2847	2895	2923
20°	2815	2903	2946
25°	2783	2899	2959
30°	2733	2896	2981
35°	2689	2900	3023
40°	2642	2916	3078
45°	2604	2946	3153
50°	2545	2978	3234
55°	2501	3027	3330
60°	2449	3089	3418
65°	2335	3146	3503
70°	2217	3153	3500
75°	2031	3142	3089
80°	1737	2684	2394
85°	1362	1519	892



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	3.0
10°-20°	292.2	8.7
20°-30°	446.9	13.3
30°-40°	547.8	16.3
40°-50°	589.2	17.5
50°-60°	566.2	16.8
60°-70°	471.4	14.0
70°-80°	289.3	8.6
80°-90°	64.5	1.9
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°	840.3	24.9
0°-40°	1388.2	41.2
0°-60°	2543.5	75.5
0°-90°	3368.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3368.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1068	1058	1064	1064	1064	101
15°	1022	1019	1039	1046	1049	288
25°	937	946	976	988	997	431
35°	818	839	883	907	920	512
45°	684	715	774	810	828	527
55°	533	579	645	689	710	476
65°	367	423	494	535	550	363
75°	195	255	302	300	297	207
85°	44	66	49	34	29	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.5	1064.5	1064.5	1064.5	1064.5
2.5°	1071.3	1061.1	1066.2	1064.5	1059.4
5°	1067.9	1057.7	1064.5	1064.5	1064.5
7.5°	1059.4	1051.0	1061.1	1062.8	1062.8
10°	1051.0	1044.2	1057.7	1059.4	1061.1
12.5°	1037.4	1032.3	1049.3	1052.7	1056.0
15°	1022.1	1018.7	1039.1	1045.9	1049.3
17.5°	1003.4	1005.1	1027.2	1035.7	1039.1
20°	983.0	988.1	1013.6	1022.1	1028.9
22.5°	961.0	967.8	994.9	1005.1	1011.9
25°	937.2	945.7	976.3	988.1	996.6
27.5°	908.3	921.9	955.9	971.2	979.6
30°	879.5	894.8	932.1	950.8	959.3
32.5°	850.6	867.6	910.0	928.7	942.3
35°	818.4	838.7	882.9	906.6	920.2
37.5°	786.1	809.9	857.4	884.6	899.8
40°	752.1	777.6	830.2	860.8	876.1
42.5°	718.2	747.0	801.4	835.3	852.3
45°	684.2	714.8	774.2	809.9	828.5
47.5°	645.2	682.5	742.0	782.7	801.4
50°	607.8	648.6	711.4	753.8	772.5
52.5°	570.5	612.9	679.1	723.3	742.0
55°	533.1	579.0	645.2	689.3	709.7
57.5°	494.1	541.6	609.5	655.4	674.0
60°	455.0	504.3	573.9	616.3	635.0
62.5°	409.2	466.9	534.8	577.3	594.2
65°	366.7	422.8	494.1	534.8	550.1
67.5°	324.3	382.0	451.6	489.0	502.6
70°	281.8	339.6	400.7	436.3	444.8
72.5°	239.4	297.1	354.8	375.2	371.8
75°	195.3	254.7	302.2	300.5	297.1
77.5°	152.8	210.5	239.4	227.5	222.4
80°	112.1	168.1	173.2	161.3	154.5
82.5°	76.4	120.5	108.7	95.1	88.3
85°	44.1	66.2	49.2	34.0	28.9
87.5°	18.7	17.0	5.1	5.1	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)