

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: P389211

Luminaire Tested: **22CZ2-34VHE-S-UNV-L940-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: P389211
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34VHE-S-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3150.9 lumens
Efficiency: N/A
Efficacy: 125.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

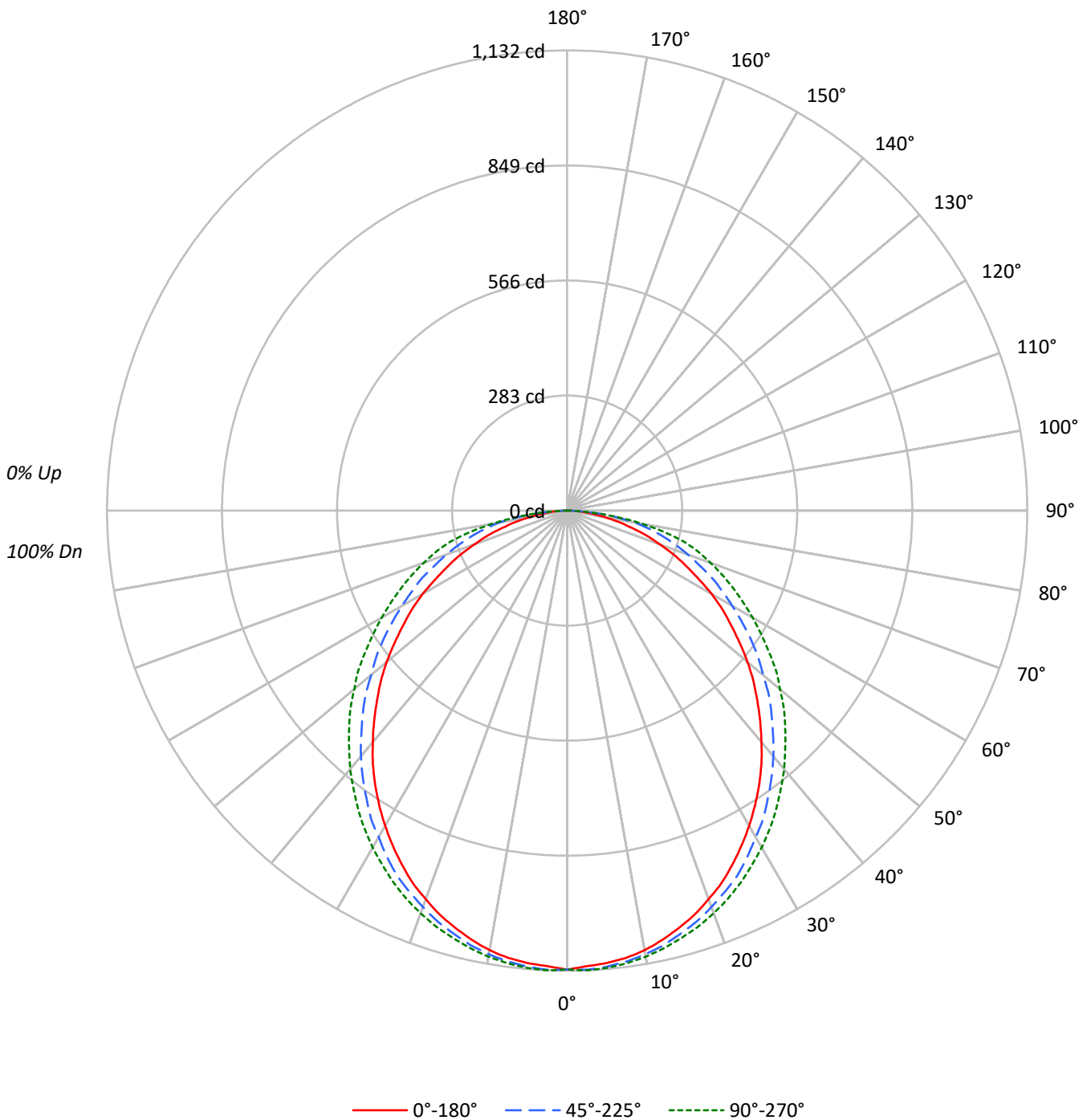
Input Watts (W): 25.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3038	3038	3038
5°	3018	3042	3050
10°	3001	3029	3045
15°	2961	3002	3031
20°	2913	2972	3019
25°	2855	2942	2999
30°	2782	2883	2974
35°	2705	2830	2946
40°	2613	2773	2918
45°	2518	2708	2887
50°	2425	2634	2862
55°	2311	2586	2842
60°	2208	2524	2833
65°	2059	2509	2865
70°	1897	2487	2950
75°	1712	2522	3103
80°	1481	2597	2916
85°	1226	2180	2180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.8	3.4
10°-20°	303.9	9.6
20°-30°	454.7	14.4
30°-40°	538.4	17.1
40°-50°	548.7	17.4
50°-60°	491.8	15.6
60°-70°	385.0	12.2
70°-80°	248.3	7.9
80°-90°	73.4	2.3
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°	865.3	27.5
0°-40°	1403.7	44.5
0°-60°	2444.2	77.6
0°-90°	3150.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3150.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1129	1129	1129	1129	1129	
5°	1117	1120	1126	1128	1129	106
15°	1063	1069	1078	1086	1088	300
25°	962	970	991	1004	1010	443
35°	823	834	862	888	897	515
45°	662	676	712	748	759	511
55°	492	509	551	590	606	442
65°	323	342	394	432	450	321
75°	165	190	243	284	298	177
85°	40	54	71	71	71	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.1	1129.1	1129.1	1129.1	1129.1
2.5°	1121.7	1124.7	1130.5	1132.0	1132.0
5°	1117.3	1120.2	1126.1	1127.6	1129.1
7.5°	1110.0	1111.4	1118.8	1121.7	1123.2
10°	1098.2	1101.1	1108.5	1112.9	1114.4
12.5°	1082.0	1086.4	1095.3	1101.1	1102.6
15°	1062.9	1068.8	1077.6	1086.4	1087.9
17.5°	1042.3	1048.2	1060.0	1070.3	1073.2
20°	1017.3	1024.7	1037.9	1049.7	1054.1
22.5°	992.3	998.2	1014.4	1029.1	1033.5
25°	961.5	970.3	990.9	1004.1	1010.0
27.5°	929.1	939.4	960.0	977.6	983.5
30°	895.3	905.6	927.7	949.7	957.1
32.5°	860.0	871.8	898.3	920.3	927.7
35°	823.3	833.6	861.5	888.0	896.8
37.5°	785.1	793.9	826.2	854.1	863.0
40°	743.9	755.7	789.5	821.8	830.6
42.5°	702.7	716.0	749.8	785.1	793.9
45°	661.6	676.3	711.5	748.3	758.6
47.5°	621.9	633.6	673.3	708.6	723.3
50°	579.2	591.0	629.2	668.9	683.6
52.5°	535.1	551.3	592.5	630.7	648.3
55°	492.5	508.7	551.3	589.5	605.7
57.5°	452.8	466.0	510.1	549.8	566.0
60°	410.2	421.9	469.0	511.6	526.3
62.5°	364.6	382.2	430.8	470.4	488.1
65°	323.4	342.5	394.0	432.2	449.9
67.5°	285.2	302.8	352.8	394.0	413.1
70°	241.1	264.6	316.1	357.2	374.9
72.5°	205.8	226.4	279.3	320.5	339.6
75°	164.7	189.6	242.6	283.7	298.4
77.5°	130.8	155.8	205.8	238.2	245.5
80°	95.6	120.6	167.6	183.8	188.2
82.5°	64.7	88.2	120.6	125.0	126.4
85°	39.7	54.4	70.6	70.6	70.6
87.5°	19.1	22.1	25.0	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)