

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: P390536

Luminaire Tested: **22CZ2-60VHE-RDP-UNV-L950-CD1-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: P390536
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-60VHE-RDP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3726.0 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

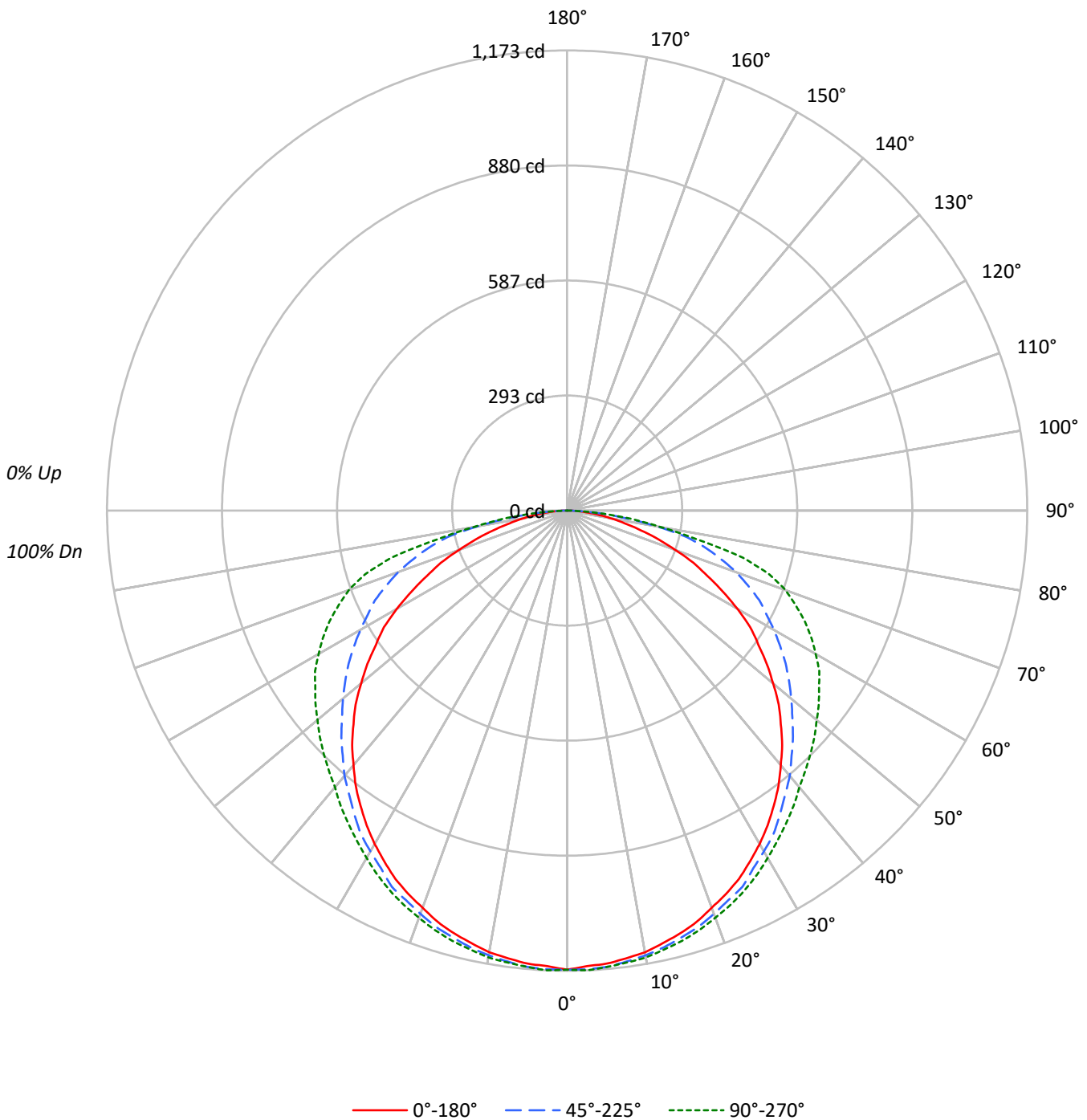
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	92	89		92	89	86		88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60		70	64	59		67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50		61	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3150	3150	3150
5°	3132	3154	3154
10°	3123	3146	3161
15°	3108	3138	3161
20°	3085	3132	3163
25°	3076	3141	3174
30°	3049	3117	3177
35°	3016	3106	3197
40°	2975	3100	3235
45°	2931	3098	3338
50°	2869	3121	3477
55°	2791	3189	3678
60°	2700	3275	3939
65°	2513	3438	4259
70°	2308	3601	4659
75°	2023	3791	4816
80°	1742	3611	3780
85°	1522	2624	2878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	3.0
10°-20°	317.9	8.5
20°-30°	485.0	13.0
30°-40°	592.2	15.9
40°-50°	633.2	17.0
50°-60°	611.1	16.4
60°-70°	526.1	14.1
70°-80°	356.0	9.6
80°-90°	93.9	2.5
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°	913.6	24.5
0°-40°	1505.7	40.4
0°-60°	2750.0	73.8
0°-90°	3726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3726.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1159	1162	1168	1168	1168	110
15°	1116	1118	1126	1132	1135	315
25°	1036	1042	1058	1064	1069	477
35°	918	926	946	965	973	575
45°	770	784	814	855	877	595
55°	595	614	680	748	784	533
65°	395	433	540	625	669	393
75°	195	258	365	439	463	209
85°	49	68	85	88	93	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.4	1170.4	1170.4	1170.4	1170.4
2.5°	1162.2	1164.9	1170.4	1170.4	1173.1
5°	1159.4	1162.2	1167.7	1167.7	1167.7
7.5°	1151.2	1154.0	1159.4	1162.2	1162.2
10°	1143.0	1145.7	1151.2	1154.0	1156.7
12.5°	1129.3	1132.0	1140.3	1145.7	1145.7
15°	1115.6	1118.3	1126.5	1132.0	1134.8
17.5°	1099.1	1104.6	1112.8	1118.3	1121.1
20°	1077.2	1082.7	1093.7	1101.9	1104.6
22.5°	1058.0	1063.5	1074.5	1082.7	1088.2
25°	1036.1	1041.6	1058.0	1063.5	1069.0
27.5°	1008.7	1014.2	1027.9	1038.8	1047.1
30°	981.3	986.8	1003.2	1016.9	1022.4
32.5°	951.1	959.3	978.5	989.5	997.7
35°	918.2	926.5	945.6	964.8	973.1
37.5°	885.3	893.6	912.7	937.4	948.4
40°	847.0	857.9	882.6	915.5	921.0
42.5°	811.3	825.0	847.0	885.3	899.0
45°	770.2	783.9	814.1	855.2	877.1
47.5°	731.8	745.5	778.4	827.8	855.2
50°	685.2	704.4	745.5	803.1	830.5
52.5°	641.4	657.8	712.7	775.7	808.6
55°	594.8	614.0	679.8	748.3	783.9
57.5°	553.7	570.1	644.1	720.9	762.0
60°	501.6	523.5	608.5	690.7	731.8
62.5°	446.8	479.7	572.9	657.8	701.7
65°	394.7	433.1	540.0	624.9	668.8
67.5°	348.1	389.2	498.9	589.3	630.4
70°	293.3	345.4	457.7	545.5	592.1
72.5°	243.9	301.5	411.1	498.9	540.0
75°	194.6	257.7	364.6	438.6	463.2
77.5°	150.8	211.1	312.5	334.4	337.1
80°	112.4	167.2	233.0	235.7	243.9
82.5°	76.7	117.9	150.8	164.5	167.2
85°	49.3	68.5	85.0	87.7	93.2
87.5°	21.9	24.7	30.2	27.4	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)