

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: P390532

Luminaire Tested: **22CZ2-60VHE-RDP-UNV-L940-CD1-SWPD1-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: P390532
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-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3466.8 lumens
Efficiency: N/A
Efficacy: 78.6 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

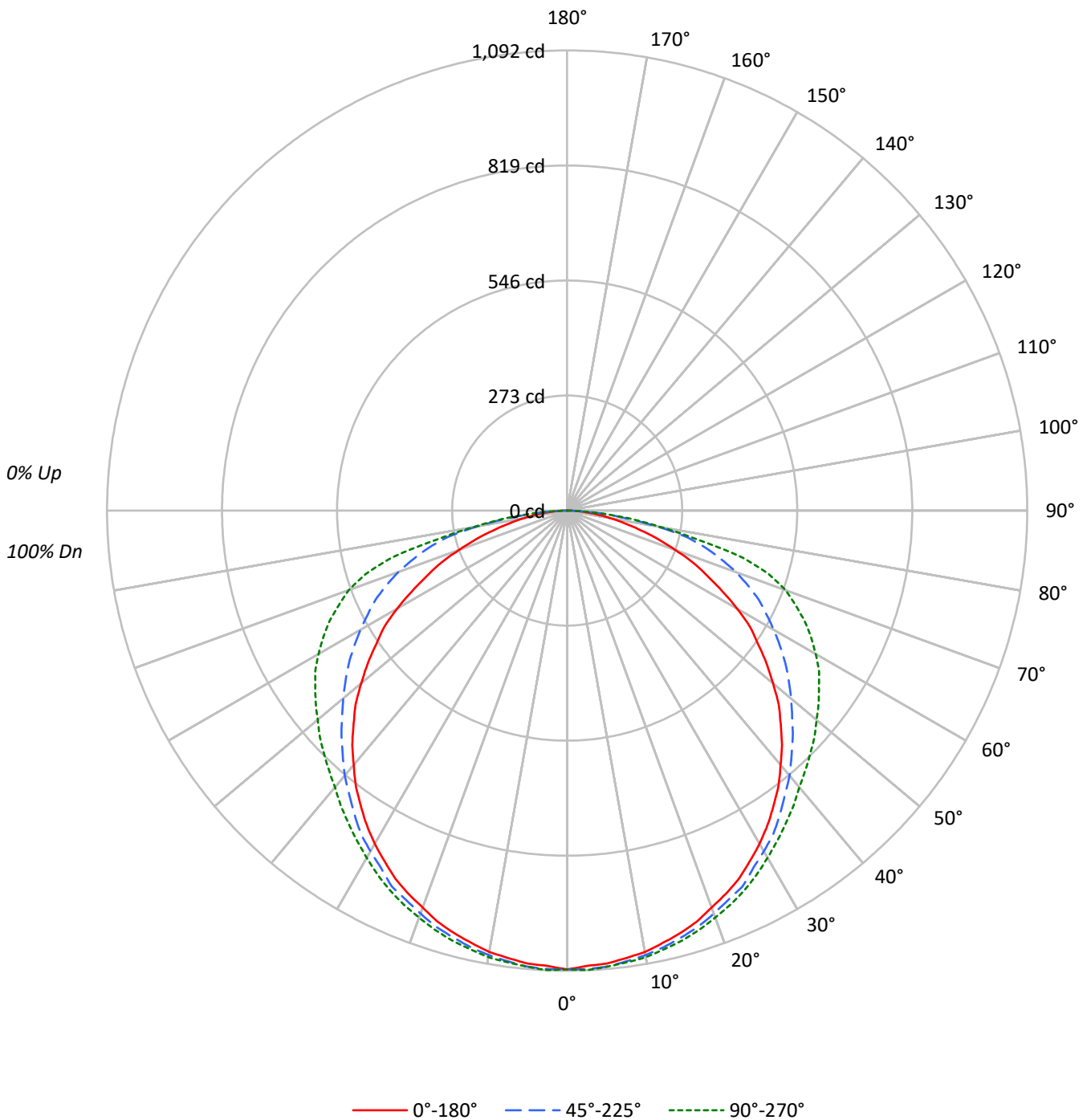
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2930	2930	2930
5°	2914	2935	2935
10°	2906	2927	2941
15°	2892	2920	2941
20°	2870	2914	2943
25°	2862	2923	2953
30°	2837	2900	2956
35°	2807	2891	2974
40°	2768	2885	3010
45°	2727	2882	3106
50°	2669	2904	3235
55°	2596	2967	3422
60°	2512	3047	3665
65°	2338	3199	3962
70°	2147	3351	4334
75°	1883	3527	4481
80°	1621	3360	3518
85°	1417	2442	2677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	3.0
10°-20°	295.8	8.5
20°-30°	451.2	13.0
30°-40°	551.0	15.9
40°-50°	589.1	17.0
50°-60°	568.6	16.4
60°-70°	489.5	14.1
70°-80°	331.2	9.6
80°-90°	87.4	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°	850.0	24.5
0°-40°	1401.0	40.4
0°-60°	2558.7	73.8
0°-90°	3466.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3466.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1079	1081	1086	1086	1086	102
15°	1038	1040	1048	1053	1056	293
25°	964	969	984	990	995	444
35°	854	862	880	898	905	535
45°	717	729	757	796	816	553
55°	553	571	632	696	729	496
65°	367	403	502	582	622	365
75°	181	240	339	408	431	194
85°	46	64	79	82	87	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1089.0	1089.0	1089.0	1089.0	1089.0
2.5°	1081.3	1083.9	1089.0	1089.0	1091.5
5°	1078.8	1081.3	1086.4	1086.4	1086.4
7.5°	1071.1	1073.7	1078.8	1081.3	1081.3
10°	1063.5	1066.0	1071.1	1073.7	1076.2
12.5°	1050.7	1053.3	1060.9	1066.0	1066.0
15°	1038.0	1040.5	1048.2	1053.3	1055.8
17.5°	1022.7	1027.8	1035.4	1040.5	1043.1
20°	1002.3	1007.4	1017.6	1025.2	1027.8
22.5°	984.4	989.5	999.7	1007.4	1012.5
25°	964.0	969.1	984.4	989.5	994.6
27.5°	938.5	943.6	956.4	966.6	974.2
30°	913.0	918.1	933.4	946.2	951.3
32.5°	885.0	892.6	910.5	920.7	928.3
35°	854.4	862.0	879.9	897.7	905.4
37.5°	823.8	831.4	849.3	872.2	882.4
40°	788.0	798.2	821.2	851.8	856.9
42.5°	754.9	767.6	788.0	823.8	836.5
45°	716.6	729.4	757.4	795.7	816.1
47.5°	680.9	693.7	724.3	770.2	795.7
50°	637.6	655.4	693.7	747.2	772.7
52.5°	596.8	612.1	663.1	721.7	752.3
55°	553.4	571.3	632.5	696.2	729.4
57.5°	515.2	530.5	599.3	670.7	709.0
60°	466.7	487.1	566.2	642.7	680.9
62.5°	415.7	446.3	533.0	612.1	652.9
65°	367.2	402.9	502.4	581.5	622.3
67.5°	323.9	362.1	464.2	548.3	586.6
70°	272.9	321.3	425.9	507.5	550.9
72.5°	227.0	280.5	382.5	464.2	502.4
75°	181.1	239.7	339.2	408.0	431.0
77.5°	140.3	196.4	290.7	311.1	313.7
80°	104.6	155.6	216.8	219.3	227.0
82.5°	71.4	109.7	140.3	153.0	155.6
85°	45.9	63.8	79.1	81.6	86.7
87.5°	20.4	23.0	28.1	25.5	25.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)