

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: P390535

Luminaire Tested: **22CZ2-60VHE-RDP-UNV-L950-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: P390535
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-SWPD1-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: 3679.8 lumens
Efficiency: N/A
Efficacy: 83.4 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

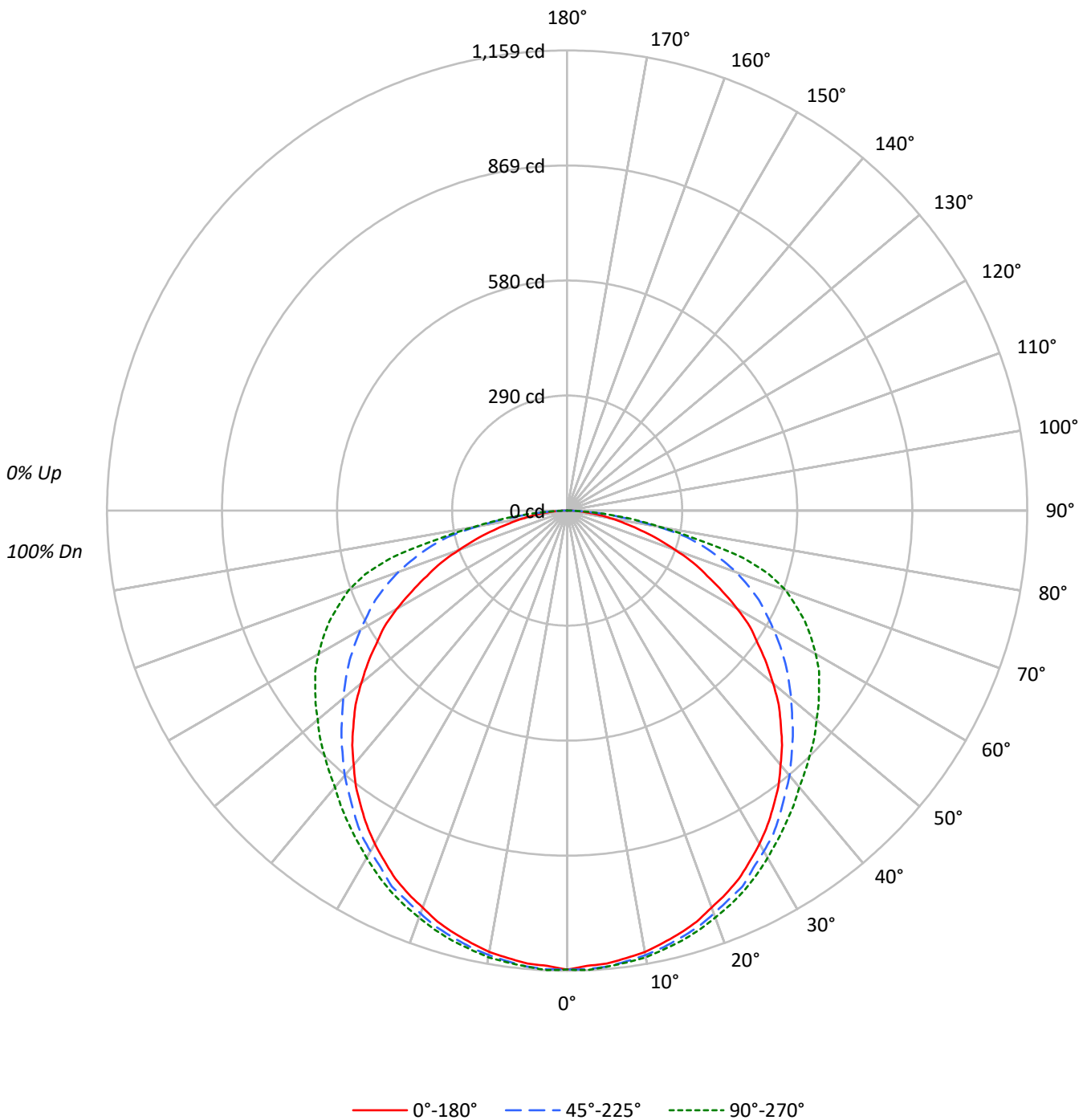
Input Watts (W): 44.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3111	3111	3111
5°	3093	3115	3115
10°	3084	3107	3122
15°	3069	3100	3122
20°	3047	3093	3124
25°	3038	3102	3135
30°	3011	3079	3137
35°	2979	3068	3157
40°	2938	3062	3195
45°	2895	3060	3296
50°	2833	3082	3434
55°	2756	3149	3632
60°	2666	3235	3890
65°	2482	3396	4206
70°	2279	3557	4600
75°	1998	3743	4757
80°	1720	3566	3733
85°	1504	2590	2841



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	3.0
10°-20°	313.9	8.5
20°-30°	479.0	13.0
30°-40°	584.8	15.9
40°-50°	625.3	17.0
50°-60°	603.6	16.4
60°-70°	519.6	14.1
70°-80°	351.5	9.6
80°-90°	92.8	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°	902.2	24.5
0°-40°	1487.1	40.4
0°-60°	2716.0	73.8
0°-90°	3679.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3679.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1156	1156	1156	1156	1156	
5°	1145	1148	1153	1153	1153	109
15°	1102	1104	1113	1118	1121	311
25°	1023	1029	1045	1050	1056	471
35°	907	915	934	953	961	567
45°	761	774	804	845	866	587
55°	587	606	671	739	774	526
65°	390	428	533	617	660	388
75°	192	254	360	433	458	206
85°	49	68	84	87	92	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1155.9	1155.9	1155.9	1155.9	1155.9
2.5°	1147.8	1150.5	1155.9	1155.9	1158.6
5°	1145.1	1147.8	1153.2	1153.2	1153.2
7.5°	1136.9	1139.6	1145.1	1147.8	1147.8
10°	1128.8	1131.5	1136.9	1139.6	1142.4
12.5°	1115.3	1118.0	1126.1	1131.5	1131.5
15°	1101.7	1104.5	1112.6	1118.0	1120.7
17.5°	1085.5	1090.9	1099.0	1104.5	1107.2
20°	1063.9	1069.3	1080.1	1088.2	1090.9
22.5°	1044.9	1050.3	1061.1	1069.3	1074.7
25°	1023.2	1028.7	1044.9	1050.3	1055.7
27.5°	996.2	1001.6	1015.1	1026.0	1034.1
30°	969.1	974.5	990.8	1004.3	1009.7
32.5°	939.3	947.5	966.4	977.2	985.3
35°	906.8	915.0	933.9	952.9	961.0
37.5°	874.4	882.5	901.4	925.8	936.6
40°	836.5	847.3	871.7	904.1	909.6
42.5°	801.3	814.8	836.5	874.4	887.9
45°	760.7	774.2	804.0	844.6	866.2
47.5°	722.8	736.3	768.8	817.5	844.6
50°	676.8	695.7	736.3	793.2	820.2
52.5°	633.4	649.7	703.8	766.1	798.6
55°	587.4	606.4	671.3	739.0	774.2
57.5°	546.8	563.1	636.1	711.9	752.5
60°	495.4	517.0	601.0	682.2	722.8
62.5°	441.2	473.7	565.8	649.7	693.0
65°	389.8	427.7	533.3	617.2	660.5
67.5°	343.8	384.4	492.7	582.0	622.6
70°	289.6	341.1	452.1	538.7	584.7
72.5°	240.9	297.8	406.1	492.7	533.3
75°	192.2	254.5	360.0	433.1	457.5
77.5°	148.9	208.4	308.6	330.3	333.0
80°	111.0	165.1	230.1	232.8	240.9
82.5°	75.8	116.4	148.9	162.4	165.1
85°	48.7	67.7	83.9	86.6	92.0
87.5°	21.7	24.4	29.8	27.1	27.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)