

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: P390717

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L930-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: P390717
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: 22CZ2-80VHE-RDP-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4381.2 lumens
Efficiency: N/A
Efficacy: 74.1 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

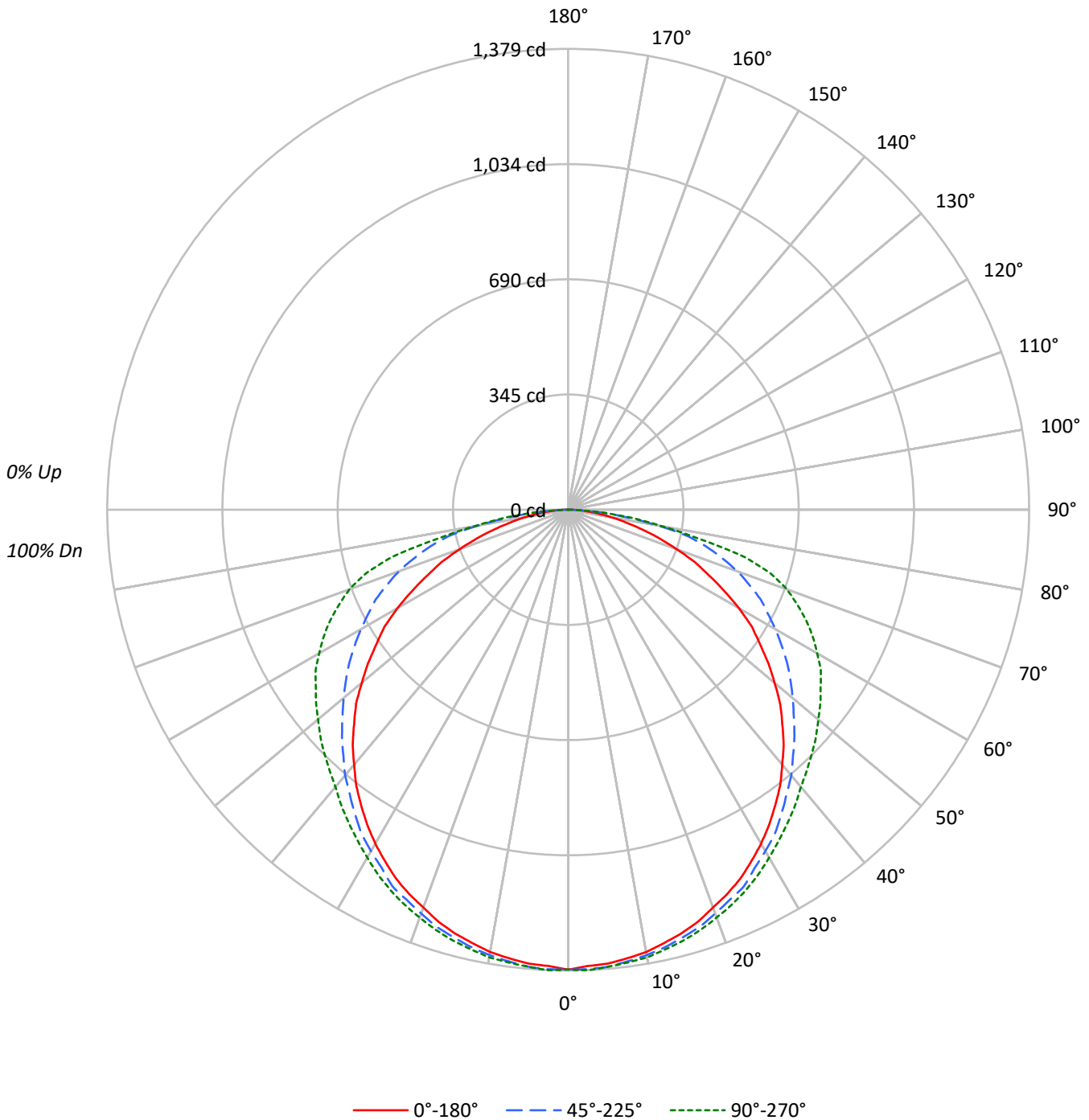
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3703	3703	3703
5°	3683	3709	3709
10°	3672	3699	3716
15°	3655	3690	3717
20°	3627	3683	3720
25°	3617	3694	3732
30°	3585	3665	3736
35°	3547	3653	3759
40°	3498	3646	3804
45°	3447	3643	3925
50°	3373	3670	4088
55°	3281	3750	4325
60°	3174	3851	4631
65°	2955	4043	5007
70°	2714	4235	5478
75°	2379	4457	5663
80°	2047	4246	4444
85°	1791	3084	3384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	3.0
10°-20°	373.8	8.5
20°-30°	570.3	13.0
30°-40°	696.3	15.9
40°-50°	744.5	17.0
50°-60°	718.6	16.4
60°-70°	618.6	14.1
70°-80°	418.5	9.6
80°-90°	110.4	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°	1074.2	24.5
0°-40°	1770.5	40.4
0°-60°	3233.6	73.8
0°-90°	4381.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4381.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1376	1376	1376	1376	1376	
5°	1363	1366	1373	1373	1373	129
15°	1312	1315	1325	1331	1334	370
25°	1218	1225	1244	1250	1257	561
35°	1080	1089	1112	1134	1144	676
45°	906	922	957	1006	1031	699
55°	699	722	799	880	922	627
65°	464	509	635	735	786	462
75°	229	303	429	516	545	245
85°	58	81	100	103	110	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1376.2	1376.2	1376.2	1376.2	1376.2
2.5°	1366.5	1369.8	1376.2	1376.2	1379.4
5°	1363.3	1366.5	1373.0	1373.0	1373.0
7.5°	1353.7	1356.9	1363.3	1366.5	1366.5
10°	1344.0	1347.2	1353.7	1356.9	1360.1
12.5°	1327.9	1331.1	1340.8	1347.2	1347.2
15°	1311.8	1315.0	1324.6	1331.1	1334.3
17.5°	1292.4	1298.9	1308.5	1315.0	1318.2
20°	1266.6	1273.1	1286.0	1295.6	1298.9
22.5°	1244.1	1250.5	1263.4	1273.1	1279.5
25°	1218.3	1224.7	1244.1	1250.5	1257.0
27.5°	1186.1	1192.5	1208.6	1221.5	1231.2
30°	1153.8	1160.3	1179.6	1195.7	1202.2
32.5°	1118.4	1128.0	1150.6	1163.5	1173.2
35°	1079.7	1089.4	1111.9	1134.5	1144.2
37.5°	1041.0	1050.7	1073.3	1102.3	1115.2
40°	995.9	1008.8	1037.8	1076.5	1082.9
42.5°	954.0	970.1	995.9	1041.0	1057.1
45°	905.7	921.8	957.2	1005.6	1031.4
47.5°	860.5	876.6	915.3	973.3	1005.6
50°	805.7	828.3	876.6	944.3	976.6
52.5°	754.2	773.5	838.0	912.1	950.8
55°	699.4	721.9	799.3	879.9	921.8
57.5°	651.0	670.4	757.4	847.6	896.0
60°	589.8	615.6	715.5	812.2	860.5
62.5°	525.3	564.0	673.6	773.5	825.1
65°	464.1	509.2	634.9	734.8	786.4
67.5°	409.3	457.7	586.6	692.9	741.3
70°	344.9	406.1	538.2	641.4	696.2
72.5°	286.8	354.5	483.4	586.6	634.9
75°	228.8	303.0	428.7	515.7	544.7
77.5°	177.3	248.2	367.4	393.2	396.4
80°	132.1	196.6	274.0	277.2	286.8
82.5°	90.2	138.6	177.3	193.4	196.6
85°	58.0	80.6	99.9	103.1	109.6
87.5°	25.8	29.0	35.5	32.2	32.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)