

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: P390721

Luminaire Tested: **22CZ2-80VHE-RDP-UNV-L935-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: P390721
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4544.3 lumens
Efficiency: N/A
Efficacy: 76.9 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

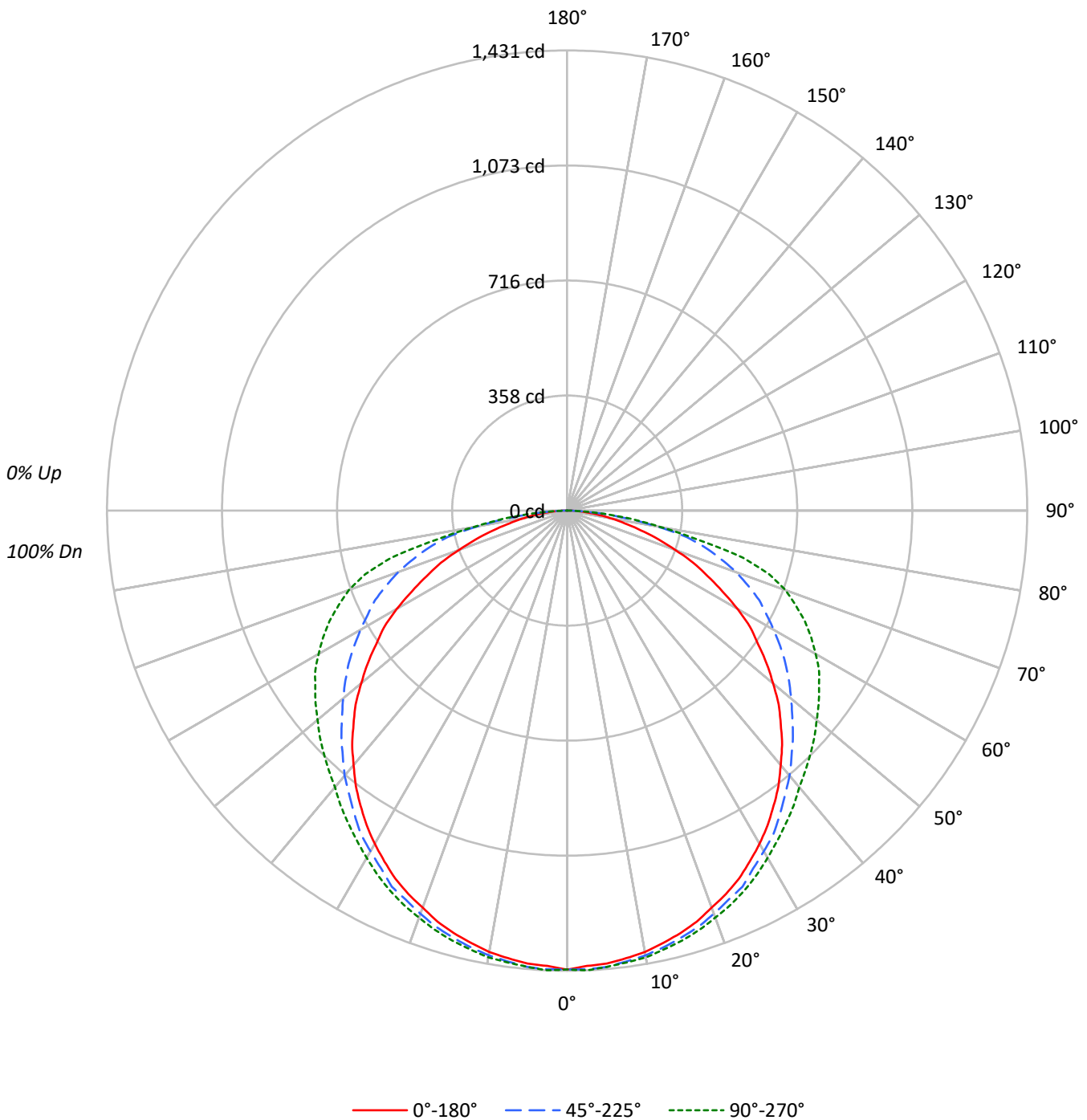
Input Watts (W): 59.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P390721

CATALOG NUMBER: 22CZ2-80VHE-RDP-UNV-L935-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P390721

CATALOG NUMBER: 22CZ2-80VHE-RDP-UNV-L935-CD1-SWPD1-U

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°	3841	3841	3841
5°	3820	3847	3847
10°	3809	3836	3855
15°	3791	3828	3856
20°	3762	3820	3858
25°	3752	3831	3871
30°	3719	3802	3874
35°	3679	3789	3899
40°	3629	3781	3946
45°	3575	3779	4071
50°	3499	3807	4240
55°	3403	3890	4486
60°	3293	3994	4804
65°	3065	4194	5194
70°	2814	4393	5681
75°	2468	4623	5874
80°	2125	4404	4610
85°	1859	3199	3511



TEST NUMBER: P390721

CATALOG NUMBER: 22CZ2-80VHE-RDP-UNV-L935-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	3.0
10°-20°	387.7	8.5
20°-30°	591.5	13.0
30°-40°	722.2	15.9
40°-50°	772.2	17.0
50°-60°	745.4	16.4
60°-70°	641.6	14.1
70°-80°	434.1	9.6
80°-90°	114.6	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°	1114.2	24.5
0°-40°	1836.4	40.4
0°-60°	3354.0	73.8
0°-90°	4544.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4544.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1414	1417	1424	1424	1424	134
15°	1361	1364	1374	1381	1384	384
25°	1264	1270	1290	1297	1304	582
35°	1120	1130	1153	1177	1187	701
45°	939	956	993	1043	1070	725
55°	725	749	829	913	956	650
65°	481	528	659	762	816	479
75°	237	314	445	535	565	255
85°	60	84	104	107	114	68
90°	0	0	0	0	0	



TEST NUMBER: P390721

CATALOG NUMBER: 22CZ2-80VHE-RDP-UNV-L935-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1427.4	1427.4	1427.4	1427.4	1427.4
2.5°	1417.4	1420.8	1427.4	1427.4	1430.8
5°	1414.1	1417.4	1424.1	1424.1	1424.1
7.5°	1404.0	1407.4	1414.1	1417.4	1417.4
10°	1394.0	1397.4	1404.0	1407.4	1410.7
12.5°	1377.3	1380.6	1390.7	1397.4	1397.4
15°	1360.6	1363.9	1374.0	1380.6	1384.0
17.5°	1340.5	1347.2	1357.2	1363.9	1367.3
20°	1313.8	1320.5	1333.8	1343.9	1347.2
22.5°	1290.4	1297.1	1310.4	1320.5	1327.2
25°	1263.6	1270.3	1290.4	1297.1	1303.8
27.5°	1230.2	1236.9	1253.6	1267.0	1277.0
30°	1196.8	1203.5	1223.5	1240.2	1246.9
32.5°	1160.0	1170.0	1193.4	1206.8	1216.8
35°	1119.9	1129.9	1153.3	1176.7	1186.8
37.5°	1079.8	1089.8	1113.2	1143.3	1156.7
40°	1033.0	1046.3	1076.4	1116.5	1123.2
42.5°	989.5	1006.2	1033.0	1079.8	1096.5
45°	939.4	956.1	992.9	1043.0	1069.7
47.5°	892.6	909.3	949.4	1009.6	1043.0
50°	835.7	859.1	909.3	979.5	1012.9
52.5°	782.3	802.3	869.2	946.1	986.2
55°	725.4	748.8	829.1	912.6	956.1
57.5°	675.3	695.3	785.6	879.2	929.3
60°	611.8	638.5	742.1	842.4	892.6
62.5°	544.9	585.0	698.7	802.3	855.8
65°	481.4	528.2	658.6	762.2	815.7
67.5°	424.6	474.7	608.4	718.7	768.9
70°	357.7	421.2	558.3	665.2	722.1
72.5°	297.5	367.7	501.4	608.4	658.6
75°	237.4	314.2	444.6	534.9	565.0
77.5°	183.9	257.4	381.1	407.8	411.2
80°	137.1	203.9	284.2	287.5	297.5
82.5°	93.6	143.7	183.9	200.6	203.9
85°	60.2	83.6	103.6	107.0	113.7
87.5°	26.7	30.1	36.8	33.4	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)