

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: P388043

Luminaire Tested: **22CZ2-44VHE-SQR-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: P388043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-SQR-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4023.0 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

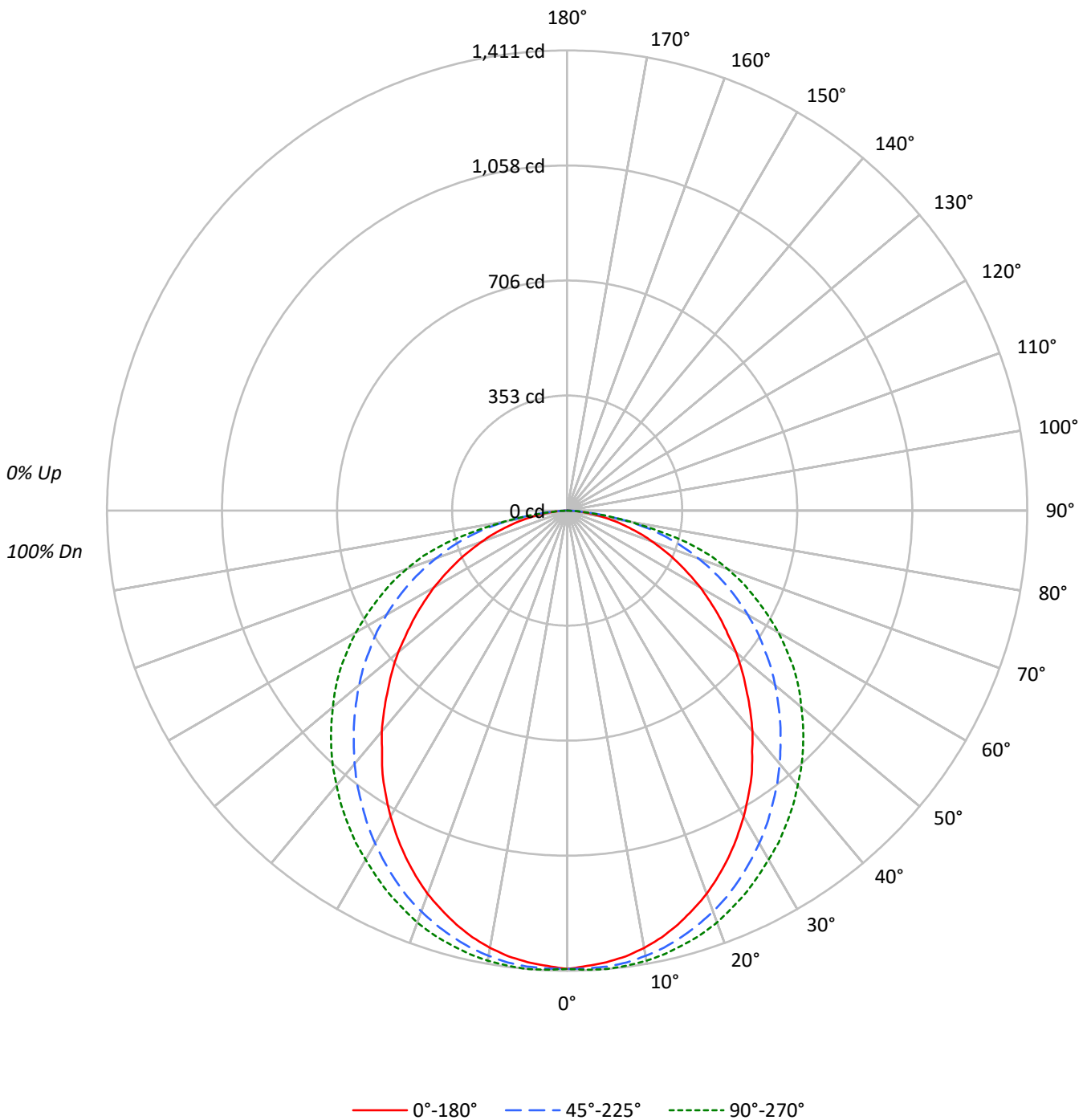
Input Watts (W): 32.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3782	3782	3782
5°	3755	3791	3812
10°	3720	3788	3830
15°	3660	3772	3841
20°	3582	3746	3849
25°	3481	3708	3844
30°	3364	3661	3839
35°	3243	3607	3851
40°	3106	3562	3863
45°	2957	3517	3895
50°	2830	3485	3925
55°	2678	3458	3986
60°	2538	3443	4028
65°	2371	3416	4060
70°	2179	3365	4116
75°	1965	3276	3971
80°	1686	2899	2989
85°	1355	1711	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.2	3.3
10°-20°	380.9	9.5
20°-30°	572.1	14.2
30°-40°	682.3	17.0
40°-50°	705.5	17.5
50°-60°	648.6	16.1
60°-70°	516.3	12.8
70°-80°	315.5	7.8
80°-90°	68.6	1.7
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°	1086.3	27.0
0°-40°	1768.6	44.0
0°-60°	3122.6	77.6
0°-90°	4023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1405	1405	1405	1405	1405	
5°	1390	1394	1403	1409	1411	132
15°	1314	1329	1354	1373	1379	370
25°	1172	1201	1249	1283	1295	539
35°	987	1029	1098	1155	1172	616
45°	777	832	924	999	1023	601
55°	571	634	737	821	850	511
65°	372	435	536	611	638	369
75°	189	244	315	370	382	201
85°	44	54	55	48	44	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1405.3	1405.3	1405.3	1405.3	1405.3
2.5°	1397.7	1399.6	1405.3	1409.1	1409.1
5°	1390.1	1393.9	1403.4	1409.1	1411.1
7.5°	1378.6	1384.3	1397.7	1405.3	1407.2
10°	1361.4	1369.1	1386.2	1397.7	1401.5
12.5°	1340.4	1351.9	1372.9	1388.1	1392.0
15°	1313.7	1329.0	1353.8	1372.9	1378.6
17.5°	1283.1	1302.2	1332.8	1355.7	1363.3
20°	1250.7	1269.8	1308.0	1334.7	1344.2
22.5°	1212.5	1237.3	1281.2	1311.8	1319.4
25°	1172.4	1201.0	1248.8	1283.1	1294.6
27.5°	1128.5	1162.8	1214.4	1256.4	1265.9
30°	1082.6	1118.9	1178.1	1223.9	1235.4
32.5°	1034.9	1076.9	1139.9	1191.5	1206.8
35°	987.2	1029.2	1097.9	1155.2	1172.4
37.5°	931.8	981.4	1057.8	1117.0	1138.0
40°	884.1	931.8	1013.9	1078.8	1099.8
42.5°	830.6	882.2	968.1	1038.7	1063.5
45°	777.1	832.5	924.2	998.6	1023.4
47.5°	727.5	782.9	878.3	956.6	981.4
50°	675.9	733.2	832.5	912.7	937.5
52.5°	620.6	683.6	786.7	866.9	895.5
55°	570.9	633.9	737.0	821.0	849.7
57.5°	519.4	584.3	691.2	771.4	798.1
60°	471.6	534.6	639.7	717.9	748.5
62.5°	420.1	485.0	588.1	664.5	693.1
65°	372.3	435.3	536.5	611.0	637.7
67.5°	324.6	387.6	483.1	553.7	584.3
70°	276.9	339.9	427.7	496.4	523.2
72.5°	234.9	290.2	374.2	437.3	462.1
75°	189.0	244.4	315.1	370.4	381.9
77.5°	147.0	196.7	255.9	280.7	284.5
80°	108.8	147.0	187.1	192.9	192.9
82.5°	72.6	101.2	116.5	118.4	116.5
85°	43.9	53.5	55.4	47.7	43.9
87.5°	15.3	15.3	9.5	5.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)