

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: P390551

Luminaire Tested: **22CZ2-65VHE-HRP-UNV-L930-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: P390551
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: 22CZ2-65VHE-HRP-UNV-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4593.6 lumens
Efficiency: N/A
Efficacy: 95.9 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

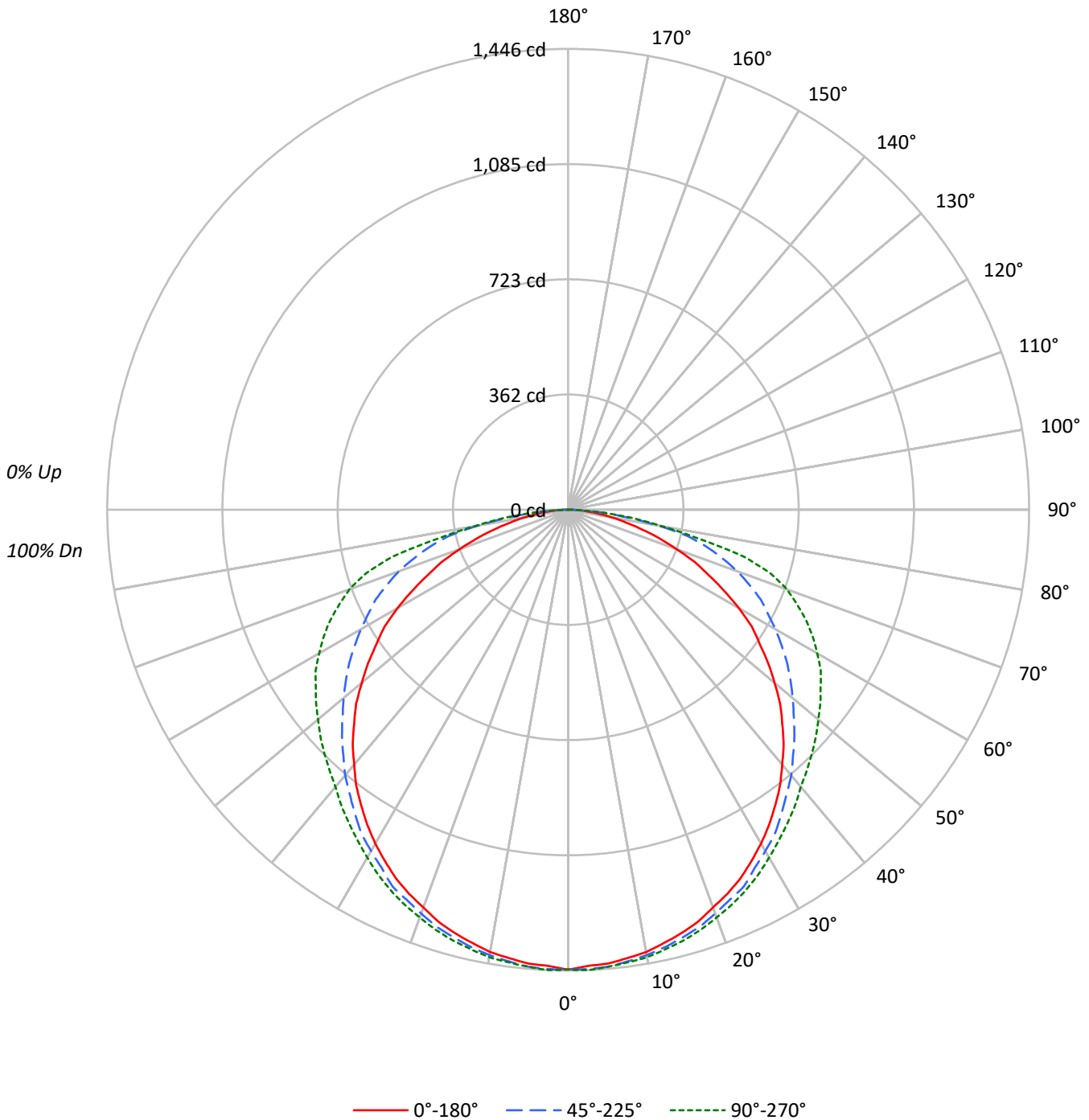
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3883	3883	3883
5°	3861	3889	3889
10°	3850	3878	3897
15°	3831	3869	3897
20°	3803	3861	3900
25°	3793	3873	3913
30°	3759	3843	3917
35°	3719	3830	3941
40°	3668	3822	3988
45°	3614	3819	4115
50°	3537	3848	4286
55°	3440	3932	4534
60°	3328	4038	4856
65°	3098	4239	5250
70°	2845	4440	5743
75°	2494	4672	5938
80°	2146	4451	4661
85°	1877	3236	3548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.5	3.0
10°-20°	391.9	8.5
20°-30°	597.9	13.0
30°-40°	730.1	15.9
40°-50°	780.6	17.0
50°-60°	753.4	16.4
60°-70°	648.6	14.1
70°-80°	438.8	9.6
80°-90°	115.8	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°	1126.3	24.5
0°-40°	1856.3	40.4
0°-60°	3390.4	73.8
0°-90°	4593.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4593.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1429	1433	1440	1440	1440	136
15°	1375	1379	1389	1396	1399	388
25°	1277	1284	1304	1311	1318	588
35°	1132	1142	1166	1190	1200	708
45°	950	966	1004	1054	1081	733
55°	733	757	838	922	966	657
65°	487	534	666	770	824	484
75°	240	318	449	541	571	257
85°	61	84	105	108	115	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1442.9	1442.9	1442.9	1442.9	1442.9
2.5°	1432.8	1436.2	1442.9	1442.9	1446.3
5°	1429.4	1432.8	1439.6	1439.6	1439.6
7.5°	1419.3	1422.7	1429.4	1432.8	1432.8
10°	1409.1	1412.5	1419.3	1422.7	1426.0
12.5°	1392.2	1395.6	1405.8	1412.5	1412.5
15°	1375.3	1378.7	1388.9	1395.6	1399.0
17.5°	1355.1	1361.8	1372.0	1378.7	1382.1
20°	1328.0	1334.8	1348.3	1358.4	1361.8
22.5°	1304.4	1311.1	1324.7	1334.8	1341.6
25°	1277.3	1284.1	1304.4	1311.1	1317.9
27.5°	1243.6	1250.3	1267.2	1280.7	1290.9
30°	1209.8	1216.5	1236.8	1253.7	1260.5
32.5°	1172.6	1182.7	1206.4	1219.9	1230.0
35°	1132.0	1142.2	1165.8	1189.5	1199.6
37.5°	1091.5	1101.6	1125.3	1155.7	1169.2
40°	1044.2	1057.7	1088.1	1128.7	1135.4
42.5°	1000.3	1017.1	1044.2	1091.5	1108.4
45°	949.6	966.5	1003.6	1054.3	1081.4
47.5°	902.3	919.1	959.7	1020.5	1054.3
50°	844.8	868.5	919.1	990.1	1023.9
52.5°	790.7	811.0	878.6	956.3	996.9
55°	733.3	756.9	838.0	922.5	966.5
57.5°	682.6	702.9	794.1	888.7	939.4
60°	618.4	645.4	750.2	851.6	902.3
62.5°	550.8	591.4	706.3	811.0	865.1
65°	486.6	533.9	665.7	770.5	824.5
67.5°	429.2	479.9	615.0	726.5	777.2
70°	361.6	425.8	564.3	672.5	729.9
72.5°	300.8	371.7	506.9	615.0	665.7
75°	239.9	317.6	449.4	540.7	571.1
77.5°	185.9	260.2	385.2	412.3	415.6
80°	138.5	206.1	287.2	290.6	300.8
82.5°	94.6	145.3	185.9	202.8	206.1
85°	60.8	84.5	104.8	108.1	114.9
87.5°	27.0	30.4	37.2	33.8	33.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)