

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: P390552

Luminaire Tested: **22CZ2-65VHE-HRP-UNV-L935-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: P390552
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-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4592.7 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

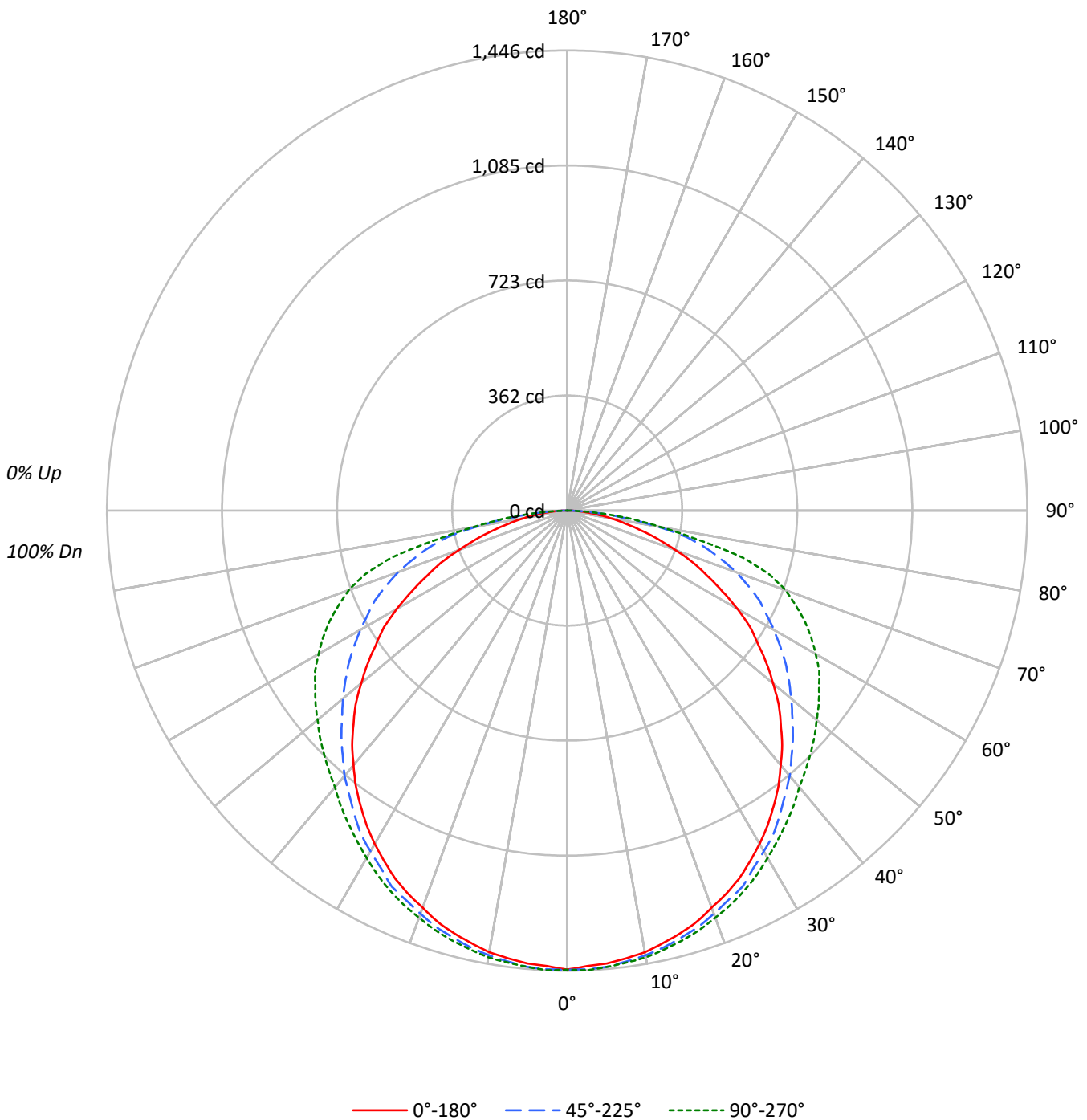
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3882	3882	3882
5°	3860	3888	3888
10°	3850	3877	3896
15°	3831	3869	3897
20°	3802	3860	3899
25°	3792	3872	3912
30°	3758	3842	3916
35°	3718	3829	3940
40°	3667	3822	3988
45°	3613	3819	4114
50°	3536	3847	4286
55°	3439	3931	4533
60°	3328	4036	4855
65°	3098	4238	5249
70°	2844	4439	5742
75°	2494	4671	5937
80°	2146	4451	4660
85°	1877	3233	3548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.5	3.0
10°-20°	391.8	8.5
20°-30°	597.8	13.0
30°-40°	729.9	15.9
40°-50°	780.4	17.0
50°-60°	753.3	16.4
60°-70°	648.5	14.1
70°-80°	438.7	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°	1126.1	24.5
0°-40°	1856.0	40.4
0°-60°	3389.7	73.8
0°-90°	4592.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4592.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1429	1432	1439	1439	1439	136
15°	1375	1378	1389	1395	1399	388
25°	1277	1284	1304	1311	1318	588
35°	1132	1142	1166	1189	1199	708
45°	949	966	1003	1054	1081	733
55°	733	757	838	922	966	657
65°	486	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°	1442.6	1442.6	1442.6	1442.6	1442.6
2.5°	1432.5	1435.9	1442.6	1442.6	1446.0
5°	1429.1	1432.5	1439.3	1439.3	1439.3
7.5°	1419.0	1422.4	1429.1	1432.5	1432.5
10°	1408.9	1412.2	1419.0	1422.4	1425.8
12.5°	1392.0	1395.3	1405.5	1412.2	1412.2
15°	1375.1	1378.5	1388.6	1395.3	1398.7
17.5°	1354.8	1361.6	1371.7	1378.5	1381.8
20°	1327.8	1334.5	1348.0	1358.2	1361.6
22.5°	1304.1	1310.9	1324.4	1334.5	1341.3
25°	1277.1	1283.9	1304.1	1310.9	1317.6
27.5°	1243.3	1250.1	1267.0	1280.5	1290.6
30°	1209.5	1216.3	1236.6	1253.4	1260.2
32.5°	1172.4	1182.5	1206.1	1219.7	1229.8
35°	1131.8	1142.0	1165.6	1189.3	1199.4
37.5°	1091.3	1101.4	1125.1	1155.5	1169.0
40°	1044.0	1057.5	1087.9	1128.4	1135.2
42.5°	1000.1	1016.9	1044.0	1091.3	1108.2
45°	949.4	966.3	1003.4	1054.1	1081.1
47.5°	902.1	919.0	959.5	1020.3	1054.1
50°	844.6	868.3	919.0	989.9	1023.7
52.5°	790.6	810.9	878.4	956.1	996.7
55°	733.1	756.8	837.9	922.3	966.3
57.5°	682.5	702.7	794.0	888.6	939.2
60°	618.3	645.3	750.0	851.4	902.1
62.5°	550.7	591.2	706.1	810.9	864.9
65°	486.5	533.8	665.6	770.3	824.4
67.5°	429.1	479.8	614.9	726.4	777.1
70°	361.5	425.7	564.2	672.3	729.8
72.5°	300.7	371.6	506.8	614.9	665.6
75°	239.9	317.6	449.3	540.6	571.0
77.5°	185.8	260.1	385.2	412.2	415.6
80°	138.5	206.1	287.2	290.6	300.7
82.5°	94.6	145.3	185.8	202.7	206.1
85°	60.8	84.5	104.7	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)