

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: P390555

Luminaire Tested: **22CZ2-65VHE-HRP-UNV-L940-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: P390555
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-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND HRP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4640.2 lumens
Efficiency: N/A
Efficacy: 96.9 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

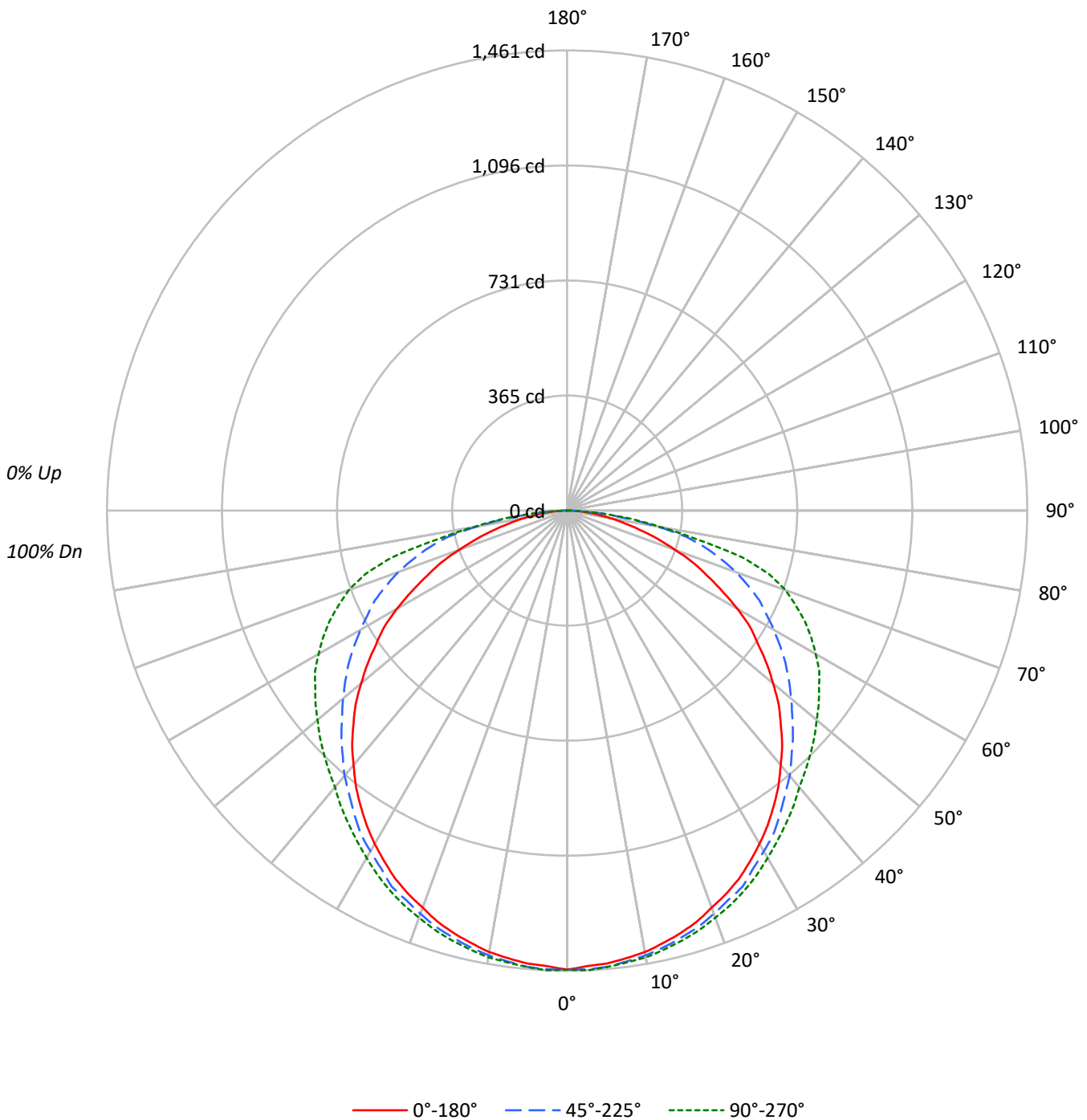
Input Watts (W): 47.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3922	3922	3922
5°	3900	3928	3928
10°	3889	3918	3936
15°	3870	3909	3937
20°	3842	3900	3939
25°	3831	3912	3953
30°	3797	3882	3956
35°	3756	3869	3981
40°	3705	3861	4029
45°	3650	3858	4157
50°	3573	3887	4330
55°	3475	3971	4580
60°	3362	4078	4905
65°	3130	4282	5303
70°	2873	4485	5801
75°	2520	4720	5998
80°	2170	4496	4708
85°	1896	3267	3585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.9	3.0
10°-20°	395.9	8.5
20°-30°	604.0	13.0
30°-40°	737.5	15.9
40°-50°	788.5	17.0
50°-60°	761.1	16.4
60°-70°	655.2	14.1
70°-80°	443.3	9.6
80°-90°	116.9	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°	1137.7	24.5
0°-40°	1875.2	40.4
0°-60°	3424.8	73.8
0°-90°	4640.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4640.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1458	1458	1458	1458	1458	
5°	1444	1447	1454	1454	1454	137
15°	1389	1393	1403	1410	1413	392
25°	1290	1297	1318	1324	1331	594
35°	1144	1154	1178	1202	1212	716
45°	959	976	1014	1065	1092	740
55°	741	765	846	932	976	664
65°	492	539	672	778	833	489
75°	242	321	454	546	577	260
85°	61	85	106	109	116	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1457.6	1457.6	1457.6	1457.6	1457.6
2.5°	1447.3	1450.7	1457.6	1457.6	1461.0
5°	1443.9	1447.3	1454.2	1454.2	1454.2
7.5°	1433.7	1437.1	1443.9	1447.3	1447.3
10°	1423.4	1426.8	1433.7	1437.1	1440.5
12.5°	1406.4	1409.8	1420.0	1426.8	1426.8
15°	1389.3	1392.7	1403.0	1409.8	1413.2
17.5°	1368.8	1375.6	1385.9	1392.7	1396.1
20°	1341.5	1348.3	1362.0	1372.2	1375.6
22.5°	1317.6	1324.4	1338.1	1348.3	1355.2
25°	1290.3	1297.1	1317.6	1324.4	1331.3
27.5°	1256.2	1263.0	1280.1	1293.7	1304.0
30°	1222.0	1228.9	1249.3	1266.4	1273.2
32.5°	1184.5	1194.7	1218.6	1232.3	1242.5
35°	1143.5	1153.8	1177.7	1201.6	1211.8
37.5°	1102.6	1112.8	1136.7	1167.4	1181.1
40°	1054.8	1068.4	1099.1	1140.1	1146.9
42.5°	1010.4	1027.5	1054.8	1102.6	1119.6
45°	959.2	976.3	1013.8	1065.0	1092.3
47.5°	911.4	928.5	969.4	1030.9	1065.0
50°	853.4	877.3	928.5	1000.2	1034.3
52.5°	798.8	819.2	887.5	966.0	1007.0
55°	740.7	764.6	846.5	931.9	976.3
57.5°	689.5	710.0	802.2	897.8	949.0
60°	624.7	652.0	757.8	860.2	911.4
62.5°	556.4	597.4	713.4	819.2	873.9
65°	491.5	539.3	672.5	778.3	832.9
67.5°	433.5	484.7	621.3	733.9	785.1
70°	365.2	430.1	570.1	679.3	737.3
72.5°	303.8	375.5	512.0	621.3	672.5
75°	242.4	320.9	454.0	546.2	576.9
77.5°	187.7	262.8	389.1	416.4	419.9
80°	140.0	208.2	290.1	293.6	303.8
82.5°	95.6	146.8	187.7	204.8	208.2
85°	61.4	85.3	105.8	109.2	116.1
87.5°	27.3	30.7	37.5	34.1	34.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)